IN THE UNITED STATES BANKRUPTCY COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

IN RE:	§	
ATP OIL & GAS CORPORATION	§	**CASE NO: 12-36187**
Debtor(s)	§	
	§	**CHAPTER 7**
	§	
BENNU OIL & GAS, LLC	§	
Plaintiff(s)	§	
	§	
VS.	§	**ADVERSARY NO. 14-3001**
	§	
BLUEWATER INDUSTRIES, L.P., *et al*	§	
Defendant(s)	§	

MEMORANDUM OPINION

Bennu has succeeded on its breach of warranty claim against Bluewater. Bennu incurred $29,709,192.00 in direct damages as a result of the failed umbilical.

Bennu owes Bluewater $16,522,937.61 in connection with the contracts it assumed.

Accordingly, Bennu's net damages total $13,186,254.39.

Procedural Background

On January 3, 2014, Bennu Oil & Gas, LLC filed an Original Complaint against Bluewater Industries L.P. and Technip USA, Inc. relating to contract work performed on the Clipper Project. (Case No. 14–3001, ECF No. 1). Bennu and Technip entered into a settlement agreement resolving all claims against one another in this action. (ECF No. 144).

There are two remaining components to this lawsuit: (i) Bennu's breach of warranty claim against Bluewater and (ii) Bluewater's counterclaim against Bennu to recover alleged amounts owed under the parties' contracts.

Bennu and Bluewater each filed motions for summary judgment. Bluewater's motion for partial summary judgment as to certain categories of damages claimed by Bennu was granted in part and denied in part. (ECF No. 99).

The first part of Bennu's Motion for Partial Summary Judgment (ECF No. 83) regarding the non-Clipper claims was granted. Summary judgment regarding the non-Clipper Telemark claims was denied and reserved for trial. By agreement of the parties, the second part of the motion regarding lien validity was abated and will be incorporated into the final judgment.

Jurisdiction

At a minimum, this Court has "related to" jurisdiction pursuant to 28 U.S.C. § 1334(b) and § 157. Section 1334 provides that district courts have subject matter jurisdiction over all "civil proceedings arising under title 11, or arising in or related to cases under title 11." 28 U.S.C. § 1334(b). With respect to bankruptcy cases that remain open, the Fifth Circuit has held that "it is not necessary to distinguish between proceedings 'arising under', 'arising in a case under', or 'related to a case under', title 11." *Wood v. Wood (In re Wood),* 825 F.2d 90, 93 (5th Cir. 1987). The Fifth Circuit noted that § 1334(b)'s language operates "conjunctively to define the scope of jurisdiction." *Id.* Consequently, bankruptcy courts need only "determine whether a matter is at least 'related to' the bankruptcy." *Bass v. Denney (In re Bass),* 171 F.3d 1016, 1022 (5th Cir. 1999) (citing *Walker v. Cadle Co. (In re Walker),* 51 F.3d 562, 569 (5th Cir. 1995); *In re Wood,* 825 F.2d at 93).

To properly analyze the jurisdictional question, a brief description of the parties' relationship to the underlying bankruptcy case is necessary.

On August 17, 2012, ATP Oil & Gas Corporation ("ATP") filed its Chapter 11 case during construction of the Clipper Project. (Case No. 12-36187, ECF No. 1). Because of its

connection to the Clipper Project, Bluewater was treated as a "critical vendor" under the Order Authorizing Certain Critical Vendor Payments. Indeed, Bluewater was paid approximately $24 million in post-petition payments by ATP in relation to the Clipper Project. (ECF No. 1 at 9).

On October 17, 2013, the Court entered the Final Sale Order approving the sale of certain of ATP's assets (collectively the "Purchased Assets") to Bennu pursuant to an Asset Purchase Agreement (the APA). (Case No. 12-36187, ECF No. 2706). In connection with the sale, Bennu acquired the Clipper Project—including ATP's warranty claim against Bluewater—and was assigned certain contracts including the Amended and Restated Master Service Agreement (the "ARMSA") and all contracts between ATP and Bluewater related to the Clipper Project. Bennu is required to pay any cure amounts with respect to the assumed contracts.

Pursuant to the Final Sale Order, Bennu acquired the Purchased Assets subject to the Senior Liens. The Senior Liens are defined as the legitimate liens on the Purchased Assets that rank senior in priority to the liens securing the claims of ATP's debtor-in-possession lenders.

Bennu was required to place $55,000,000.00 in the Senior Lien Escrow. (Case No. 12-36187, ECF No. 2706 at 17). The Final Sale Order provides that the Senior Liens must be satisfied first out of the Senior Lien Escrow and any Excess Senior Liens will continue to attach to the Purchased Assets. Bennu retained a residual interest in any amounts remaining in the Senior Lien Escrow after payment of all Senior Liens. ATP also retained a contingent $50,000.00 interest in the Senior Lien Escrow. (*Id*. at 8) (stating that "to the extent that any amounts remain in the Senior Lien Escrow… the first $50,000.00 released from the Senior Lien Escrow to the Purchaser shall be remitted to the Debtor's estate.").

On December 16, 2013, Bluewater filed a lawsuit against Bennu in the 32nd Judicial District Court, Parish of Terrebonne, State of Louisiana. The lawsuit was subsequently removed

to the United States District Court for the Eastern District of Louisiana, transferred by that Court to the United States District Court for the Southern District of Texas, and referred by the District Court to the Bankruptcy Court. (Case No. 14-03057). In July of 2013, Bluewater filed liens under the Louisiana Oil Well Lien Act ("LOWLA") in Plaquemines Parish, Lafourche Parish, and Terrebonne Parish, Louisiana for amounts allegedly owed to Bluewater in connection with the Clipper Project. (ECF No. 14-3001 at 27-2 at 5). Bluewater asserts that its $17,249,352.40 in liens constitute Senior Liens under the Final Sale Order and are therefore payable out of the Senior Lien Escrow. (ECF No. 27 at 36).

On January 3, 2014, Bennu filed this lawsuit asserting its breach of warranty claim against Bluewater and seeking a declaration of "the amount, if any, of the Senior Liens held by [Bluewater] taking into account all applicable offsets, credits, counterclaims and other reductions." (ECF No. 1 at 18).

Generally, a matter arises in a case under title 11 if it, "by its nature, could arise only in the context of a bankruptcy case." *In re Wood,* 825 F.2d at 97 ("If the proceeding is one that would arise only in bankruptcy, it is also a core proceeding ..."); *Seven Fields Dev. Corp. v. Ernst Young LLP (In re Seven Fields Dev. Corp.)*, 505 F.3d 237 at 260 (3d Cir. 2007) ("[C]laims that 'arise in' a bankruptcy case are claims that by their nature, not their particular factual circumstances, could only arise in the context of a bankruptcy case.") (quoting *Stoe v. Flaherty,* 436 F.3d 209, 218 (3rd Cir.2006); *Southmark Corp. v. Coopers & Lybrand (In re Southmark Corp.)*, 163 F.3d 925 at 930 (5th Cir. 1999).

This adversary proceeding "arises in" a case under Title 11 because it is an action seeking determination as to whether and to what extent Bluewater's asserted privileges constitute "Senior Liens" pursuant to the Bankruptcy Court's Final Sale Order. *See* 28 U.S.C. § 157(b)(2)(K)

("determinations of the validity, extent, or priority of liens."). Indeed, the Court clarified in the Final Sale Order that it would "have exclusive jurisdiction over any dispute as to the amount and priority of any Senior Lien Escrow until the Senior Lien Escrow is exhausted." (Case No. 12-36187, ECF No. 2706).

The Court also has "related to" jurisdiction over this lawsuit because resolution of the case may affect ATP's bankruptcy estate. The Fifth Circuit has construed "related to" jurisdiction broadly. *See TXNB Internal Case v. GPR Holdings L.L.C. (In re TXNB Internal Case)*, 483 F.3d 292, 298 (5th Cir. 2007). An adversary proceeding falls within the court's "related to" jurisdiction if "the outcome of that proceeding could *conceivably* have any effect on the estate being administered in bankruptcy." *In re Wood*, 825 F.2d 90, 93 (5th Cir. 1987) (citing *Pacor, Inc. v. Higgins (In re Pacor)*, 743 F.2d 984, 994 (3rd Cir.1984)). The possibility that a suit may ultimately have no effect on the estate is not enough to conclude that there would be no *conceivable* effect. *Id.*

Any claims adjudicated in the lawsuit that reduces the Senior Lien Escrow may reduce or eliminate the estate's $50,000.00 contingent interest in the Senior Lien Escrow. Additionally, the depletion of the Senior Lien Escrow by Bluewater's claims could cause other lien claimants—including Bluewater—to assert claims against the ATP estate.

Subject matter jurisdiction is determined at the time the complaint is filed. *Carney v. Resolution Trust Corp.*, 19 F.3d 950, 954 (5th Cir. 1994) (citing *Rosa v. Resolution Trust Co.,* 938 F.2d 383, 392 n. 12 (3d Cir.), *cert. denied,* 502 U.S. 981 (1991)). As of the date of the petition—January 3, 2014—the Senior Lien Escrow had not yet been exhausted. Accordingly, at a minimum the Court has "related to" jurisdiction over this lawsuit.

Stern Authority

Under *Stern v. Marshall*, the Supreme Court held that whether a bankruptcy court can enter a final judgment in a case depends on whether the cause of action stems from the bankruptcy itself or would necessarily be resolved in the claims allowance process. 131 S.Ct. 2594, 2618 (2011). If the action does not stem from the bankruptcy itself, or need not be resolved in the claims allowance process, the parties are entitled to litigate the action in an Article III court. *Id.*

This adversary proceeding involves state law claims between two non-debtor parties that need not be resolved by the claims allowance process. However, in its most recent decision interpreting *Stern*, the Supreme Court held that parties may consent to the bankruptcy court's adjudication of a "*Stern* claim"—a claim designated for final adjudication in the bankruptcy court as a statutory matter, but prohibited from proceeding in that way as a constitutional matter. *Wellness Int'l Network, Ltd. v. Sharif*, 135 S. Ct. 1932 (2015) ("We hold that Article III is not violated when the parties knowingly and voluntarily consent to adjudication by a bankruptcy judge.").

Bennu and Bluewater knowingly and voluntarily consented to adjudication by this Court in their jointly filed pre-trial statement. (ECF No. 122) ("Bennu and Bluewater do consent to entry of final orders or judgment by the Bankruptcy Court if it is determined that a bankruptcy judge, absent consent of the parties, cannot enter final orders or judgments consistent with Article III of the U. S. Constitution.").

Accordingly, this Bankruptcy Court has the authority to fully adjudicate this lawsuit.

Louisiana Law

The parties agree that Louisiana law applies to all issues in this case. The Outer Continental Shelf Lands Act ("OCSLA") applies Louisiana law (as surrogate federal law) to the extent that it is "not inconsistent with this Act [OCSLA] or with other Federal laws." 43 U.S.C. § 1333(a)(2)(A). No inconsistency has been shown. Accordingly, Louisiana law applies to this lawsuit.

I. Bennu's Warranty Claim

Bennu's warranty claim against Bluewater seeks direct damages that it incurred as a result of a failed umbilical that occurred during the Clipper Project.

A. Relevant Facts

(i) The Clipper Project

This case arises from an offshore construction project known as the "Clipper Project." ATP was the operator and a lessee of a federal offshore lease relating to Green Canyon Block 300. Bennu acquired the Clipper Project from the sale of certain assets of ATP.

The Clipper Project called for the construction of a sub-sea tieback from two sub-sea oil and gas wells located in Green Canyon Block 300, GC 300 Block #4 well and the GC 300 Block #2 well (the "Clipper Wells"). (ECF No. 122-1 at 3). The project included the procurement, construction and installation of flow lines and an electro-hydraulic control umbilical (the "umbilical") that would be connected from the Clipper Wells to a production platform for the purpose of extracting oil and gas. The platform selected for the Clipper Project was the "Front Runner" platform spar, located on Green Canyon Block 338, which is approximately 16 miles from the Clipper Wells. (ECF No. 122-1 at 3).

ATP hired Bluewater as the general contractor on the Clipper Pipeline Project in the Gulf of Mexico. Prior to any work, Bluewater and ATP entered into several agreements, including the ARMSA and a work order ("Work Order II") issued on or about February 1, 2012—by which Bluewater agreed to provide certain design, engineering, construction, and other services. Among other responsibilities, Bluewater was responsible for the design, manufacturing, and installation of the umbilical. As part of the sale of the Clipper Project, the ARMSA and any contracts between ATP and Bluewater related to the Clipper Project were assumed by ATP and assigned to Bennu.

Under Work Order II, Bluewater was required to "design, engineer, fabricate, and/or procure, load out, transport, field erect, tie in and test" certain "well control system components." (ECF No. 47–4 at 1).

Work Order II included a lump-sum turnkey price of $123,019,878 (the "Lump Sum Price") for certain work defined in the "Scope of Work" (the "Lump Sum Work"). Bennu contends that Bluewater breached its warranty by delivering an umbilical that failed shortly after the inception of its use.

(ii) The Umbilical

The umbilical was designed to provide electrical and hydraulic power and chemical delivery (for flow assurance purposes) to the subsea wells and their control systems. At the subsea well location the umbilical is terminated with an Umbilical Termination Assembly (commonly referred to as "SUTA" or "UTA"). The SUTA contains electrical cable termination assemblies that interface between the cables within the umbilical and electrical connectors outside of the SUTA. The electrical termination assembly is referred to as a Field Assembled Cable Termination ("FACT").

The steel hydraulic tubes in the umbilical are terminated in hydraulic coupling plates also on the outside of the UTA. The hydraulic and electrical utilities are distributed to the subsea wells via Hydraulic Flying Leads ("HFLs") and Electrical Flying Leads ("EFLs") installed post umbilical installation. The HFLs and EFLs connect the umbilical, through the SUTA, to the subsea control module located on equipment at the wellheads commonly referred to as the "tree."

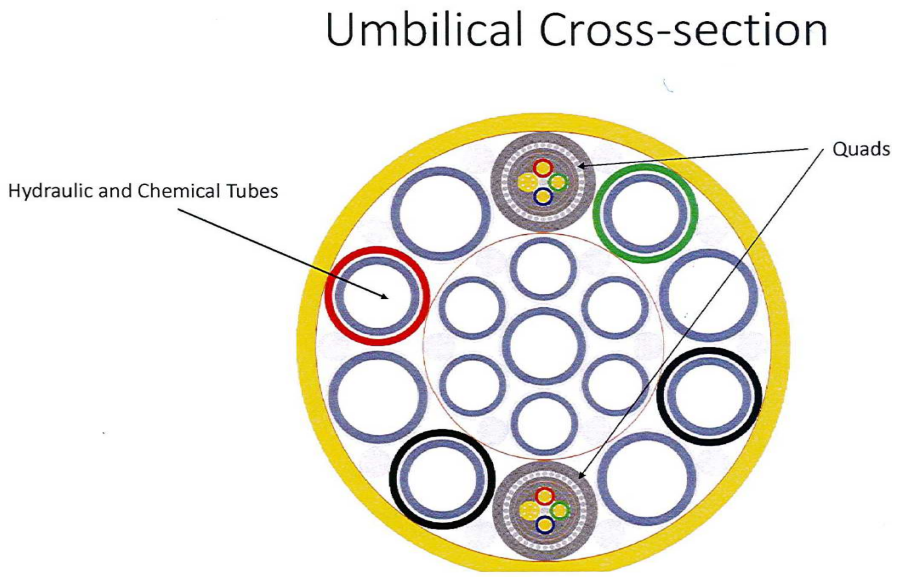
A subsea control system must be implemented to provide control and monitoring of the subsea wells (e.g., to open and close the flow of the wells). For the Clipper Project, the key components of the subsea control system are the Master Control System installed on the Front Runner spar, the umbilical, and the Subsea Control Module. The Master Control System provides supervisory control, data acquisition, and safety shutdown commands as part of an automated process. The Subsea Control Module responds to signals initiated by the Master Control System over the umbilical and distribution system commanding hydraulically operated valves on the tree as required, and acquiring data from local sensors and "downhole" in the reservoir.

The length of the umbilical, which runs from the Front Runner spar to the SUTA near the Clipper Wells, is approximately 87,200 feet (about 16 miles) operating in a water depth of approximately 3,450 feet. The umbilical consists of a dynamic section, which runs from the spar to the sea floor, and a static section, which runs along the sea floor to the wells. The umbilical is approximately 4.5 inches in diameter. (ECF No. 139 at 64) (Geoffrey's High's testimony).

Bennu's Exhibit #38 is a picture of the umbilical cross-section. (Bennu's Exhibit 38). A physical cross-section for the Clipper Umbilical was admitted into evidence on November 3, 2014. (ECF No. 137 at 44). Throughout the trial, this physical cross-section was frequently referred to as "the chunk." The cross-section consists of a bundle of 15 hydraulic tubes, two

electrical quads, and filler material designed to provide spacing and crush resistance, that was arranged in a circular geometry.

The hydraulic tubes feed into the cross-section. The electrical quads are diametrically opposed on the outside diameter of the cable. Eight of the hydraulic tubes ring the outside of the cable next to the electrical quads; the remaining seven hydraulic tubes are in the center of the cable. The outer yellow ring of the cross-section is a protective sheathing that offers protection to the umbilical and holds the geometry of the tubes inside.



(Bennu's Exhibit #38).

Each of two "electrical quads" is an electrical cable assembly consisting of four conductors where the diagonally opposite conductors form pairs. In each quad, two of the conductors are for signal and two conductors are for power. The umbilical contains two separate, redundant, electrical quads (the "A Quad" and the "B Quad"), each independently capable of providing the necessary electrical connection to the wells. Without at least one functioning electrical quad, the operator cannot fully operate the subsea wellhead.

In connection with the construction of the Clipper Project, Bluewater entered into several subcontracts. On March 31, 2009, Bluewater entered into a subcontract agreement with Technip under which Technip agreed to perform certain obligations related to the Clipper Project, including installation of the umbilical. On August 22, 2011, Bluewater executed a Purchase Order with Parker Hannifin Corp ("Parker") for the design and manufacture of the Umbilical (the "Parker Subcontract").

(iii) Manufacturing Process

The manufacturing process conducted by Parker consisted primarily of bundling the major components of the umbilical into one contiguous cable. The major components (filler, steel tubes and electrical cables) are placed on multiple reels. Parker loaded these reels on to its "cabling" machine, which assembles the umbilical bundle as a continuous length. As each reel of electrical cables is expended, the cabling process must be stopped so that a new reel can be loaded, and Parker personnel can splice together the lengths of electrical quads to form one continuous quad. (ECF No. 122-2 at 20). The procedure is repeated until the required length (in this case, approximately 16 miles) is achieved.

Not all umbilicals utilized for subsea controls require splicing. Whether a particular umbilical requires splicing depends upon the length of the umbilical and the manufacturer's reel capacity. The cabling machine used by Parker to manufacture the umbilical had a limited reel capacity. As a result, eight splices per quad (sixteen total splices) were necessary to construct electrical quads long enough for the Clipper Umbilical. (ECF No. 122-2 at 20).

Ordinarily, the cable manufacturer—Tyco Rochester—performs the splices. In this case, Parker personnel conducted the splices. This is the first umbilical project on which Parker personnel had ever spliced cables. The Parker personnel that performed the splices were

(i) certified by Tyco, (ii) provided with Tyco's Engineering Repair Procedures, and (iii) observed by Tyco representatives while conducting the first two splices. (ECF No. 148 at 83) (Phillip Malsbary's testimony).

The quality of the splice is important. The umbilicals must withstand water pressures at over 3,000 feet of depth. As set forth in more detail below, the quads within the umbilicals cannot deliver electrical power or signal if water penetrates the umbilical and comes in contact with the conductors. However, water penetration into the umbilical would not preclude the use of the hydraulic tubes unless the tubes suffered additional damage.

Factory Acceptance Tests and System Integration Tests are performed onshore by the manufacturer immediately after it completes the umbilical. (ECF No. 140 at 102) (Horacio Flores's testimony). Parker completed this testing around August 23, 2012. (Bluewater's Exhibit 80) (a "Certificate of Acceptance" signed by representatives of Bluewater and Parker indicating that the umbilical had passed all Factory Acceptance Tests).

(iv) Transpooling

The umbilical remained at the Parker facility until transpooling began on approximately October 26, 2012. (Bluewater's Exhibit 52 at 6). Transpooling is the process by which the umbilical is transferred from the storage reel at Parker's facility to the installation reel or carousel on board the installation vessel, the *Chickasaw*. (ECF No. 122-2 at 17). This process was performed by employees from Parker and Technip. (ECF No. 137 at 157-158) (Jeffrey Parliament's testimony). After transpooling was complete, the *Chickasaw* departed the Parker facility on November 3, 2012, and arrived at the Clipper field on November 6, 2012. (Bluewater's Exhibit 52 at 22, 28).

(v) Installation

Technip installed the umbilical using the *Chickasaw*. Installation is the process by which the umbilical is unspooled and laid on the sea floor from the Front Runner platform to the well heads by personnel on the *Chickasaw*. (ECF No. 122-2 at 17). The installation crew waited approximately ten days—due to bad weather—to begin the installation process. During this time, the umbilical remained spooled on the ship. (ECF No. 139 at 116) (James Jones testifying).

After beginning the lay on November 15, 2012, Technip had to temporarily cease laying the umbilical several times due to bad weather. The *Chickasaw* finished the laying of the umbilical on November 20, 2012. (ECF No. 137 at 195). Throughout this process, Technip monitored the hydraulic pressure and electrical connectivity of the umbilical. (ECF No. 148 at 92) (Phillip Malsbary's testimony).

(vi) Post-Installation

In late December of 2012, Technip connected the flying leads (HFL and EFL) to the UTA and the oil and gas wells. (ECF No. 139 at 102) (Geoffrey High's testimony). During the hook-up process, a post-installation "tree test" and pre-commissioning tests were performed by Aker (the manufacturer of the trees and control modules) on the installed components. (Bluewater's Exhibit 125).

During its installation, the gas well's HFL was damaged. The HFL was subsequently removed, repaired, and reinstalled.

(vii) Umbilical Failure

First production from the Clipper Oil Well occurred on or about March 16, 2013. From first oil production until April 4, 2013, the Umbilical operated on the B Quad for electrical power

and communications. On April 4, 2013, the B Quad suffered a failure, losing electrical power and communication with the Clipper Oil Well.

The Front Runner reestablished electrical power and electrical communication with the Clipper Oil Well by switching to the A Quad. On April 5, 2013, 19 hours after being put into use, the A Quad suffered an electrical failure, losing electrical power and communication with the Clipper Oil Well. As of April 5, 2013, the failures of the two quads resulted in a complete loss of electrical power and communications between the subsea system and the Front Runner platform.

Post-failure, the umbilical's hydraulic tubes were successfully pressure tested and showed no signs of any leakage. (Bennu's Exhibit 21). The umbilical's hydraulic tubes have been fully functional since installation of the umbilical.

Between May 27 and 29, 2013, a remotely operated vehicle ("ROV") was deployed to conduct a subsea video survey of the umbilical.

Without electrical power, the Clipper Gas Well could not be operated. The Clipper Oil Well could be operated temporarily on only hydraulic controls, but only after ATP obtained permission from the Bureau of Safety and Environmental Enforcement ("BSEE"). This required a vessel to intervene to open the valves on the tree. (ECF No. 122 at 8). BSEE's approval was premised on two conditions: (i) ATP had to show progress towards a permanent solution to replace the failed electrical quads and (ii) ATP had to provide a temporary electrical connection to the Clipper Wells while the permanent solution was being pursued. (ECF No. 122-2 at 22).

In October of 2013, ATP arranged to have a vessel, the *EMAS Ambassador*, positioned above the Clipper Wells. An electrical down line was deployed from the *Ambassador* to the Clipper Wells in order to establish a temporary electrical connection to the wells.

This temporary connection enabled the start-up of the Clipper Gas Well on or about October 11, 2013. It also allowed for the restart of the Clipper Oil Well, which could not be restarted with hydraulic controls only. (ECF No. 122 at 9).

ATP (and subsequently Bennu) decided to install a permanent electrical-only umbilical. This included two separate, redundant electrical quads to replace the failed quads on the original umbilical. (ECF No. 122-2 at 23).

One of the two replacement quads became operational in May 2014. The other quad was non-functional following installation and was subsequently repaired and restored to functionality. As part of the replacement umbilical, Bennu used a section of dynamic umbilical that was already in its inventory. (ECF No. 122-2 at 23).

The Clipper Wells are currently producing. Hydraulic controls are provided to the Clipper Wells through the original umbilical, while the replacement electrical quads provide electrical power to the Clipper Wells.

Bennu contends that Bluewater breached its warranty by delivering an umbilical that failed shortly after the inception of its use. Bennu asserts that it has suffered approximately $31 million in direct damages to remediate and replace the umbilical.

B. Analysis

Bluewater asserts that ATP's actions following the umbilical failure defeat any contractual warranty rights that Bennu otherwise would have against Bluewater for three reasons: (i) Bluewater is legally excused from its warranty obligations because it was prevented from even attempting to perform those obligations; (ii) section 8.6 of the ARMSA requires Bennu to indemnify Bluewater even if the umbilical failed as a result of a manufacturing or design defect; and (iii) the decision to leave the umbilical on the seabed makes it impossible for

Bennu to carry its burden to rule out any cause for the failure other than a defect. (ECF No. 157 at 8). The Court rejects all three of these arguments.

(i) Bluewater is Not Legally Excused From Performing its Warranty Obligations

Bluewater argues that "for ATP to make demand on Bluewater to perform its warranty obligations, ATP itself was obligated to permit Bluewater to retrieve and inspect the umbilical, and then to repair or replace it. The record is clear that ATP (and Bennu) failed to perform its own obligation under the warranty provision. Under Louisiana law, that failure excused Bluewater from performing its warranty obligations." (ECF No. 157 at 8).

Bluewater cites to two Louisiana Civil Code articles to support this argument.

Civil Code Article 1993 provides: "[i]n the case of reciprocal obligations, the obligor of one may not be put in default unless the obligor of the other has performed or is ready to perform his own obligation."

Civil Code Article 2022 provides that "[e]ither party to a commutative contract may refuse to perform his obligation if the other has failed to perform or does not offer to perform his own at the same time, if the performances are due simultaneously."

Neither of these provisions excuses Bluewater from its warranty obligations. There are three reasons: (i) the warranty provision in the ARMSA does not contain a "reciprocal obligation" or "simultaneous performance" requirement that Bennu provide Bluewater the opportunity to retrieve and inspect the umbilical before it can assert its warranty claim; (ii) Bluewater agreed that retrieving the umbilical was futile; and (iii) even if Bluewater wished to retrieve the umbilical, it lacked the resources necessary to do so.

a. The Warranty Provision is not a "Reciprocal Obligation"

Bluewater cites to two Louisiana cases to support its "reciprocal obligation" argument. In *Retail Merchants Association v. Forrester,* a Louisiana Appellate Court barred a hospital from recovering a contractual debt because it failed to perform its own contractual obligation to first seek recovery from the patient's insurer. *Retail Merchants Ass'n, Inc. v. Forrester*, 47, 936 (La. App. 2 Cir. 5/15/13), 114 So. 3d 1175, 1180. In that case, the language in the contract imposed a mandatory duty on the hospital to file an insurance claim and apply any payment toward reducing the amount owed by the debtor. (*Id*. at 1179).

In *Zindo v. Pelican Builders, Inc.*, another Louisiana Appellate Court excused performance by a lender and its construction expert of their obligation to supervise the construction of a borrower's house because the borrower failed to notify them that construction had begun until the work was complete. *Zindo v. Pelican Builders, Inc.*, 367 So. 2d 1294, 1296 (La. Ct. App. 1979). The court held that "[a]ssuming that the lender and its expert did owe plaintiff competent supervision, she prevented their performing their obligation and therefore cannot hold them liable for the consequences of their failure to perform." *(Id.* at 1296).

This case is distinguishable from *Retail Merchants* and *Zindo* because (i) the provision does not require ATP to provide Bluewater the opportunity to retrieve and inspect the umbilical before it can assert its warranty claim; and (ii) even if it did, ATP did not deprive Bluewater of such opportunity.

Bluewater's warranty obligation with respect to the umbilical is set forth in paragraph 4 of the ARMSA:

> [Bluewater] shall furnish all Equipment, Goods and facilities required to accomplish the Work within the times specified in this Agreement or in the applicable Work Order. All Equipment, Goods and facilities shall be serviceable, fit for their intended purposes and kept in first-class operating condition… **Any**

> **and all defective or unsuitable Equipment or Goods shall be removed, replaced or corrected, as applicable, by [Bluewater] without additional cost or risk to [ATP].**

(Bluewater's Exhibit 35 at 6) (emphasis added).

Bluewater interprets this provision to mean that "for ATP to make demand on Bluewater to perform its warranty obligations, ATP itself was obligated to permit Bluewater to retrieve and inspect the umbilical, and then to repair or replace it." (ECF No. 157 at 8). Bluewater interprets this provision to require that the umbilical be removed before determining whether to replace the equipment or correct the defect, as applicable. (ECF No. 160 at 85).

Bluewater's interpretation is wrong. The provision does not require removal. The provision states that there are three options for remediating the defective equipment. The equipment "shall be removed, replaced *or* corrected, *as applicable*, by Bluewater, without additional cost or risk to ATP." (*Id*.) (emphasis added).

Nor does the provision state that ATP is required to provide Bluewater the opportunity to remove and inspect the umbilical before ATP is allowed to make a demand on its warranty claim. While the provision makes it clear that Bluewater is the one that has to replace, remove, or correct the defective equipment, it is silent as to which party decides whether removing, replacing, or correcting the defective equipment is "applicable." In any event, the overwhelming evidence in this case demonstrates that removal was not applicable.

(b) The Parties Agreed not to Retrieve the Umbilical

Even assuming that the warranty provides Bluewater with the sole decision of whether to remove, replace, or correct the failed umbilical, the evidence is clear that all parties—including Bluewater—agreed that retrieving the damaged umbilical and attempting to repair it made no sense. Bluewater agreed that replacing the umbilical was the rational solution.

The evidence shows that Bluewater played a major role in the decision-making process regarding how to remediate the failed umbilical. (ECF 138 at 217). Although Ross Frazer's—ATP's project manager—testimony suggests that it was ultimately ATP's decision not to pull up the umbilical, Mr. Flores—Bluewater's umbilical engineer—was actively involved in setting forth proposals on whether to retrieve the umbilical. His testimony demonstrates that he was integral to the decision-making process. (ECF No. 140 at 156) ("We discussed it and we were trying to figure out what the -- you know, what the best course of action will be to continue producing the Clipper wells.").

It is undisputed that Bluewater never *demanded* that it be allowed to go out and pull up the umbilical.

> Mr. Landis: "…what was [Bluewater] to do, demand that it be allowed to go out and pull up the umbilical?"
> Judge: "Did it do that?"
> Mr. Landis: "It did not do that."

(ECF No. 160 at 91-92).

However, right after the umbilical failed in April of 2013, Mr. Flores drafted a plan to retrieve the Subsea Umbilical Termination Assembly ("SUTA") to determine whether the issue was in the SUTA. At this time, Mr. Flores and several others believed that the Field Assembled Cable Termination units, located at the SUTA, may have failed.

Weeks later, on May 1, 2013, Mr. Flores wrote an email stating that "we should contemplate the possibility that it may be cheaper and faster to just order an "electrical umbilical" to be laid alongside the now "hydraulic umbilical only." (Bennu's Exhibit 19).

A third-party consultant, EnerMech, was hired to conduct a series of tests (from the Frontrunner Spar) to determine the cause of the electrical failure. On May 28, 2013, the EnerMech testing was completed. (Bennu's Exhibit 67). The results demonstrated that the

failure was not in the SUTA. The failure was at an undetermined distance from the SUTA, in the direction of the spar. After the EnerMech Report came out, the consensus opinion was that there was no reason to retrieve the umbilical or the SUTA and that Mr. Flores' proposed alternative plan was the appropriate course of action. On May 22, 2013, Mr. Frazer wrote an email to Mr. Flores seeking confirmation that Mr. Flores agreed that the EnerMech tests ruled out the SUTA as the source of the problem. (Bennu's Exhibit 23). Mr. Flores responded by agreeing that the SUTA was unlikely to be the source of the problem and that "unless a definitive damage location is observed by the ROV, that would require lifting the UTA to reach the umbilical section for repair, there is not much to gain by lifting the UTA." (*Id.*). Accordingly, as of May 22, 2013, representatives of ATP and Bluewater agreed that there was no reason to pull up the umbilical.

In October of 2013, Bluewater suggested retrieving the umbilical, but only after Bennu indicated that it would be pursuing a warranty claim for the umbilical. And even at this point in time, Jim Woodward—Bluewater's Vice President—admitted that pulling up the umbilical would be harmful to Bluewater. Mr. Woodward's email to Stan Mendenhall (Bluewater's President) agreed with the strategy of bluffing or threatening to pull up the umbilical, but acknowledged that actually following through would be to "cut off your nose to spite your face." (Bennu's Exhibit 32).

Bluewater supported the decision to lay an electric-only umbilical along-side the hydraulic-only umbilical instead of pulling up the umbilical. Indeed, Mr. Flores appears to have been the first person to suggest this course of action. Accordingly, even if the warranty provision was a "reciprocal obligation" under Louisiana law, there is no evidence to suggest that Bennu deprived Bluewater of the opportunity to retrieve and inspect the umbilical before Bennu pursued its warranty claim.

(c) Bluewater Lacked the Resources Necessary to Retrieve the Umbilical

Bluewater claims that if ATP had told Bluewater that it was going to assert a warranty claim for the defective umbilical, it would have demanded that the umbilical be pulled up and inspected.

However, it is undisputed that Bluewater did not have the means to retrieve the entire umbilical. Accordingly, even if Bluewater had demanded to pull the entire umbilical, it would have been unable to do so. "[T]he law does not require the performance of a vain or futile gesture before a litigant, who is injured as a result of the breach of a contract may recover damages." *Young v. Carr*, 140 So. 2d 796, 797 (La. Ct. App. 1962).

Bluewater responds by claiming that if ATP had paid Bluewater a portion of what it was owed under the contract and had ATP indicated that it planned to assert a warranty claim, then Bluewater would have in fact removed it to prove there wasn't a manufacturing defect. (ECF No. 160 at 89).

There is no evidence to support Bluewater's contention that it would have opted to remove the umbilical had it known that ATP (or its successor) would be asserting a warranty claim against Bluewater. Mr. Woodward testified that they would have had the resources to remove the umbilical had ATP paid what it owed. (ECF No. 148 at 35-36) (testifying that he believed that Bennu owed at least $3 million to Bluewater). However, Mr. Woodward admitted that it would have been economically irrational to actually remove the umbilical.

Bluewater argues that Bennu's decision not to pull up the umbilical was essentially a choice to produce oil instead of its right to assert a warranty claim. (ECF No. 160 at 93). However, there is simply no basis under either Louisiana law or the terms of the ARMSA to conclude that Bennu is precluded from bringing its warranty claim.

(ii) Bluewater's Interpretation of Section 8.6

At closing arguments, Bluewater argued that section 8.6 of the ARMSA require Bennu to indemnify Bluewater even if the umbilical failed as a result of a manufacturing or design defect. (Bluewater's Exhibit 35 at 12). The Court rejects Bluewater's interpretation.

Section 8.6 of the ARMSA provides:

> [ATP] assumes full responsibility for and agrees to release, protect, defend, and **hold harmless** [Bluewater] from and against any and **all Losses related to, resulting from or in connection with damage to the above surface property or equipment of [ATP]**, including without limitation, pipelines, flowlines and risers, that arise out of, in connection with, incident to or result directly or indirectly from this Agreement and applicable Work Order(s), REGARDLESS OF WHETHER CAUSED OR CONTRIBUTED TO, IN WHOLE OR IN PART, BY THE SOLE OR CONCURRENT NEGLIGENCE, STRICT LIABILITYY OR FAULT OF ANY OF [BLUEWATER].

(Bluewater's Exhibit 35 at 12) (bold emphasis added).

Section 5.12 states that "Company shall at all times own and retain title to all work in progress." (Bluewater's Exhibit 35 at 8). Bluewater therefore argues that section 8.6 requires ATP to indemnify Bluewater for damage to the umbilical under any circumstance, regardless of fault.

Bluewater's interpretation would render the warranty provisions meaningless. Paragraphs 4 and 6 of the ARMSA are carefully drafted provisions defining Bluewater's warranty obligations. Paragraph 6 includes Bluewater's warranty obligations regarding "Engineering and Design Services" and "Workmanship, Materials, Equipment, Goods, Services, and Personnel.[1]" (Bluewater Exhibit 35 at 9). Paragraph 4 further provides that Bluewater "shall furnish all Equipment, Goods and facilities required to accomplish the Work" and "[a]ny and all

[1] "(a) it will perform all Services hereunder in a Workmanlike Manner . . . ; and (b) all purchased products, Goods, Equipment, and materials shall be new . . . shall meet Specifications, shall be free from defects in design, workmanship and materials, and shall comply with all applicable Laws and Regulations . . . ." § 6.2.

defective or unsuitable Equipment or Goods shall be removed, replaced or corrected, as applicable, by [Bluewater] without additional cost or risk to [ATP]." (*Id*. at 6).

Additionally, if the parties intended the indemnity of Section 8 to cover property like the umbilical, the Builder's Risk provision of Work Order II would have been unnecessary. If Bennu had already agreed to indemnify Bluewater with respect to anything that could happen to any of the property, there would be no reason for Bluewater to require ATP to either purchase builder's risk insurance or indemnify it for damage incurred during installation. *See John Bailey Contractor, Inc. v. Dep't of Transp. & Dev.*, 439 So. 2d 1055, 1058 (La. 1983) ("[C]ourts have long held that, 'A cardinal rule in the construction of contracts is that the contract must be viewed as a whole and, if possible, practical effect given to all its parts, according to each the sense that results from the entire agreement so as to avoid neutralizing or ignoring any of them or treating them as surplusage.'") (internal citations omitted).

Read in context with all other provisions of the ARMSA, the reference to "above surface property or equipment of Company" in Section 8.6 refers to property of ATP outside of the work in progress. The provision is not meant to cover damage to equipment that the contractor is installing—it was intended to protect Bluewater from damage to property owned by ATP that Bluewater was not working on, such as equipment on the platform.

(iii) Bennu's Burden of Proof

The parties have several disputes regarding the parties' respective burdens of proof in this lawsuit, including (a) whether Louisiana's burden shifting framework applies to Bennu's breach of warranty claim; (b) if so, how it applies to the facts in this case; and (c) who bears the burden of proof on Bluewater's indemnity claim.

(a) Louisiana's Burden Shifting Approach

The Louisiana Supreme Court employs a burden shifting approach in breach of warranty cases where construction designed as a permanent installation fails shortly after being put into use. *Town of Slidell v. Temple*, 164 So. 2d 276 (La. 1964); *Joyner v. Aetna Cas. & Sur. Co.*, 251 So. 2d 166 (La. 1971).

In *Town of Slidell*, the plaintiff hired the defendant-contractor to construct a pipeline. The pipeline collapsed about fourteen months after the line was constructed. In that case, the defendant was responsible for the installation of the pipeline, but was not responsible for the plan and specifications. Therefore the issue was whether the pipeline collapsed because the contractor defectively installed the pipeline, or whether it failed because of a design defect.[2]

The plaintiff maintained that the failure was due to a defective or imperfectly sealed joint, which allowed sand to seep into the pipe; the defendants argued that the failure of the pipe could have been caused by several other issues, such as inadequate contract specifications, heavy rainfalls, insufficient pipe strength, or various other causes.

The Louisiana Supreme Court alluded to a "general inference" of faulty workmanship: "[i]t is the idea that something is wrong when a project designed as a permanent installation fails in such a short time. It is the thought that the owner has not received what he bargained for. In this case either because the plans and specifications were wanting or because there was faulty workmanship involved." *Town of Slidell v. Temple*, 246 La. 137, 149, 164 So. 2d 276, 280 (1964). The Court held that "[w]hen plaintiff established that there was no deficiency in the

[2] "The serious question presented was whether the foundation failed because the plans and specifications did not provide for its reinforcement, or whether the foundation failed because of faulty sealing of the pipe joint. In the former instance, the lack of proper plans and specifications would relieve the contractor of responsibility, whereas, in the latter instance faulty sealing of the pipe joint would place the responsibility for the failure squarely upon the contractor." *Town of Slidell v. Temple*, 246 La. 137, 146, 164 So. 2d 276, 279 (1964).

plans and specifications, the inference then is that faulty workmanship was involved." *Town of Slidell v. Temple*, 246 La. 137, 149, 164 So. 2d 276, 280 (1964).

The Court held in favor of the plaintiff while acknowledging that "[t]here was no positive evidence to establish the cause of the sewerage line failure… But the evidence which was produced led clearly to the inference that the break in the line was due to a deterioration in the foundation which supported it. This was true because there was no evidence of a crushing of the pipe from above." *Town of Slidell v. Temple*, 246 La. 137, 145, 164 So. 2d 276, 279 (1964).

In *Joyner*, a diving board broke three months after installation at an apartment complex. The Appellate Court held that plaintiff failed to sufficiently prove that any particular defect caused the failure. The Louisiana Supreme Court reversed the decision, citing the burden shifting approach adopted in *Town of Slidell*:

> [A]n inference of faulty workmanship or material arises when construction designed as a permanent installation fails shortly after being put into use. *Town of Slidell v. Temple*, 246 La. 137, 164 So.2d 276 (1964); *Saunders v. Walker*, 229 La. 426, 86 So.2d 89 (1956); *Plunkett v. United Electric Service*, 214 La. 145, 36 So.2d 704 (1948). *See also Thompson v. Burke Engineering Sales Co*., 252 Iowa 146, 106 N.W.2d 351, 84 A.L.R. 2d 689 (1960). The effect of the inference is to place upon the contractor the burden of establishing that the soon-appearing defect in the work and the resultant damages did not result from his faulty workmanship or materials but instead from other cause.

Joyner v. Aetna Cas. & Sur. Co., 259 La. 660, 665-66, 251 So. 2d 166, 168 (1971).

However, before the inference of fault arises, the injured party "must establish by a preponderance of the evidence that after the construction left the control of the contractor upon its delivery to the owner, no fault independent of the contractor's workmanship or material (such as the injured party's own fault) caused the failure." *Joyner v. Aetna Cas. & Sur. Co.*, 259 La. 660, 678, 251 So. 2d 166, 172 (1971).

If the Plaintiff satisfies this burden, then "the result [is] that the contractor **must carry the burden of disproving** that such was the cause of the collapse of the work and the ensuing damages." *Joyner v. Aetna Cas. & Sur. Co.*, 259 La. 660, 678, 251 So. 2d 166, 172 (1971) (emphasis added).

The failed umbilical issue in this case fits within the construct of these cases. Under Work Order II, Bluewater was responsible for the manufacture, design and installation of the umbilical. The umbilical—which had a design life of 25 years (Bennu's Exhibit 50 at 35), and was never intended to be removed from the seabed—failed only three weeks after it was put into use.

Bluewater argues that the *Joyner* framework requires the plaintiff to eliminate all possible causes of the failure for which the contractor could ***not*** be held liable in order to satisfy its initial burden. (ECF No. 164 at 8). Bluewater misinterprets *Joyner*.

Bluewater cites to *Lewis v. La Adrienne, Inc.* in arguing that Bennu's initial burden is to eliminate all possible causes other than manufacturing defect. *Lewis v. La Adrienne, Inc.*, 44,602 (La. App. 2 Cir. 8/19/09), 17 So. 3d 1007. However, nowhere in *Lewis* even suggests that the plaintiffs were required to *eliminate* all possible causes other than manufacturing defect.[3]

Bluewater's standard—requiring a plaintiff to eliminate all possible causes outside of the defendant's scope—vastly overstates plaintiff's initial burden. The *Joyner* framework requires

[3] The *Lewis* court held that plaintiffs-homeowners had not carried their burden of proof against a flooring company for damages caused by moisture beneath wood flooring installed by the company because (i) "[t]here [was] no evidence in the record, however, indicating what caused, created or led to the excessive moisture beneath the wood flooring which caused the damage"; and (ii) the plaintiffs' expert testified that the "excessive moisture problem could have been the result of several different possible causes, including the dishwasher, faulty plumbing, busted drain pipes or broken sewer pipes, none of which related to Floor Works' materials or workmanship." *Lewis v. La Adrienne, Inc.*, 44,602 (La. App. 2 Cir. 8/19/09), 17 So. 3d 1007, 1010. Moreover, the *Lewis* court failed to cite *Joyner* or *Town of Slidell* in reaching its decision.

Bennu to establish, by a preponderance of the evidence, that no fault independent of Bluewater's design, workmanship or materials caused the failure.

Once this burden is met, an inference of Bluewater's fault arises and the burden then shifts to Bluewater to prove that the failure of the umbilical was the result of something outside of Bluewater's scope. Presenting evidence that the umbilical was designed or manufactured properly is insufficient to rebut the inference against Bluewater. *See Joyner v. Aetna Cas. & Sur. Co.*, 251 So. 2d 166, 168 (La. 1971) ("The effect of the inference is to place upon the contractor **the burden of establishing** that the soon-appearing defect in the work and the resultant damages did not result from his faulty workmanship or materials **but instead from other cause**.") (emphasis added).

Bluewater's defense relies on (i) the absence of direct proof establishing a manufacturing or design defect and (ii) Bennu's alleged inability to eliminate all other possible causes for the failure. However, even if Bluewater could establish both of these, this would be insufficient to defeat the inference of faulty workmanship.

(b) Bluewater's Scope of Warranty

Bluewater made express warranties[4] with regard to the manufacture, design, and installation of the umbilical. In the ARMSA, Bluewater warranted that "(a) it will perform all Services hereunder in a Workmanlike Manner . . . ; and (b) all purchased products, Goods, Equipment, and materials shall be new . . . shall meet Specifications, shall be free from defects in design, workmanship and materials, and shall comply with all applicable Laws and Regulations…" (Bluewater's Exhibit 35 at § 6.2).

[4] Neither *Joyner* nor *Town of Slidell* involves cases where the contractor made express warranties. In those cases, the Court appears to impose an implied duty to provide non-faulty workmanship and materials on the contractors. The Court has no reason to believe that the fact that this case involves an express warranty for "workmanlike" would change the burden shifting analysis.

Bluewater further agreed that "[a]ll Equipment, Goods and facilities shall be serviceable, fit for their intended purposes and kept in first-class operating condition" and "shall be new and of the type specified in the Specifications." If any of the Equipment or Goods were "defective or unsuitable," Bluewater agreed that the "defective or unsuitable Equipment or Goods shall be removed, replaced, or corrected, as applicable, by [Bluewater] without additional cost or risk to [ATP]." (*Id.* at § 4).

The scope of warranty was defined by each specific project. For the Clipper Project, Work Order II defined the warranty scope: Bluewater agreed to "complete all work and furnish all equipment, vessels, tools, materials, supplies and personnel necessary and incidental to the engineering, procurement, **installation** and commissioning for the subsea development pipelines, 'Front Runner' topsides modifications, production risers and subsea well control system." (Bennu's Exhibit 5 at 1) (emphasis added).

With respect to the umbilical, Bluewater agreed to "design, engineer, fabricate and/or procure, load out, transport, field erect, tie-in and test" the well control system for the Clipper Project which was to include a "well control umbilical including SUTA, hydraulic/electric flying leads" and other component parts. (*Id.* at §§ 2.2, 2.2.1).

Moreover, all testimony is consistent that the design, manufacture, and installation of the umbilical, SUTA and flying leads were within Bluewater's scope.

Accordingly, in order to shift the burden to Bluewater, Bennu must prove, by a preponderance of evidence, that no damage occurred post installation. Bennu easily satisfies this burden.

It is undisputed that there is no evidence to support the conclusion that post-installation damage caused the umbilical's failure. (ECF No. 160 at 96) (Judge: "I got no evidence of post-

installation causes. I don't have any power surge or—"; Mr. Landis: "No. I would not argue with that.").

Although Bluewater has speculated that certain outside events could have damaged the umbilical, the speculation is unsupported by the record. For example, Bluewater speculates that a subsea trauma could have occurred. As detailed below, the entire 16-mile length of the cable was surveyed with a video camera. Although portions are difficult or impossible to see, the bulk of the 16-mile length is plainly visible. It shows no damage. And, any subsea trauma could not have been too traumatic because the hydraulic lines have functioned properly for the entire time period. Had an anchor dragged the umbilical, it is difficult to imagine an absence of video evidence and functional umbilical lines.

Bluewater's speculation provides no basis to upset the preponderance of the evidence.

Accordingly, Bluewater must prevail on its indemnity claim to defeat Bennu's warranty claim.

(c) Bluewater Bears the Burden of Proof on its Indemnity Claim

Bluewater's primary defense to Bennu's warranty claim is the indemnity provision in Work Order II. The builder's risk insurance obligated ATP to either:

> (a) provide Builder's Risk insurance at its sole cost …; ***or*** (b) to the extent [ATP] does not obtain Builder's Risk insurance, indemnify, defend, and hold harmless [Bluewater] and its subcontractors of any tier ("CONTRACTOR GROUP") from and against liability for loss or damage to (i) the Work in progress and (ii) property of third parties without regard to fault, including the negligence, strict liability or other fault of any member of CONTRACTOR GROUP.

(Bennu's Exhibit 5 at 9, § 1.4) (emphasis added).

ATP did not obtain Builder's Risk Insurance for the Clipper Project. (ECF No. 148 at 193) (Cliff Dronet's testimony). Accordingly, Bennu must indemnify Bluewater for any damage that occurs to the "work in progress." Both parties appear to interpret "work in progress" to

mean that Bennu bears the loss if the umbilical failed due to damage incurred during installation or transpooling. (*See* ECF No. 157 at 11; ECF No. 158 at 15). However, the parties disagree as to who bears the burden of proving or disproving installation damage.

Bluewater argues that it does not have the burden of proof on its indemnity claim because the provision includes the term "hold harmless" and therefore any claim related to the subject matter of the indemnity provision is precluded as a matter of law. (ECF No. 160 at 65). The Court rejects this argument.

Louisiana case law requires the party seeking indemnity to bear the burden of proof. *See Marseilles Homeowners Condo. Ass'n v. Broadmoor, L.L.C.*, 111 So. 3d 1099, 1111 (La. Ct. App. 2014) ("Because [defendant] is the party demanding performance of the indemnity and defense obligations, it is the party *at trial* with the burden of proof.") (citing La. Civ. Code Art. 1831) (emphasis in original). Bluewater has not cited to any cases that make a material distinction between "hold harmless" agreements and indemnity clauses. However, many Louisiana cases recognize no distinction between the two and treat them interchangeably. *See Hall v. Malone*, 133 So. 3d 91, 93-94 (La. Ct. App. 2014) ("defend, indemnify and hold harmless" provision described as both a "hold harmless" and "indemnity" provision); *see also McGill v. Cochran-Sysco Foods*, 818 So. 2d 301, 306 (La. Ct. App. 2002).

At closing arguments, Bluewater cited to two cases in support of its claim that inclusion of "hold harmless" eliminates Bluewater's burden to prove that the indemnity provision is applicable and precludes Bennu from even bringing a warranty claim. (ECF No. 160 at 65) (citing *Avenal v. State*, 886 So. 2d 1085, 1102 (La. 2004); *Slavich v. Dep't of Wildlife and Fisheries*, 994 So. 2d 85 (La. Ct. App. 2008)).

Neither of these cases supports Bluewater's position. The indemnity/hold harmless provisions in *Avenal* and *Slavich* related to a Louisiana statute governing oyster leases. Louisiana had been reluctant to issue new oyster leases during coastal restoration projects that had the potential to decrease oyster production. A compromise was reached so that oyster leases could be issued as long as they contained a hold harmless and indemnity clause in favor of the state. *Avenal v. State*, 886 So. 2d 1085, 1096.

In these cases, the oyster leases expressly precluded lease holders from bringing "unconstitutional takings" claims against the state for damages resulting from coastal diversion projects. (*Id*. at 1097) (the provision stated that "[t]his lessee hereby agrees to hold and save the State of Louisiana, its agents or employees, free and harmless from any claims for loss or damages to rights arising under this lease, from diversions of fresh water or sediment, depositing of dredged or other materials or any other actions, taken for the purpose of management, preservation, enhancement, creation or restoration of coastal wetlands…"). When oyster fishermen brought claims alleging the type of damage that was expressly precluded in the lease, both the *Avenal* and *Slavich* courts held that the claims were invalid. *Avenal v. State*, 886 So. 2d 1085, 1098-99 ("…[T]he language of the 1989 clause is clear on its face and explicitly releases the State from any liability to the oyster fishermen due to this diversion project…").

The oyster cases involve hold harmless agreements where party A agrees to hold party B harmless for conduct type X. When party A sues party B for damage resulting from conduct type X, it necessarily follows that the claim fails as a matter of law.

In this case, the indemnity provision covers loss or damage during installation only, and it is disputed whether installation caused any loss or damage. Accordingly, unlike the oyster lease cases, the Court must determine whether the indemnity provision is applicable.[5]

Even if the logic of *Avenal* and *Slavich* applied, it would simply mean that any claim brought by Bennu for *installation* damage is legally precluded. Bennu is asserting a claim for damages caused by a manufacturing defect.

Alternatively, Bluewater argues that the indemnity provision requires this Court to modify the *Joyner* framework by placing the initial burden on Bennu to prove that nothing post-*manufacturing* (as opposed to post-*installation*) caused the failure. (ECF No. 164 at 7-8) ("Thus, the "*Joyner* framework" must be modified to fit the facts of this case. Specifically, because Bennu (not Bluewater) bears the risk of installation-related failure, it cannot carry its burden by merely showing that nothing damaged the Umbilical *post*-installation.").

The *Joyner* framework allocates the parties' respective burdens based on control. In *Joyner*, the plaintiff's initial burden was to establish that the diving board did not fail due to something that occurred "after the construction left the **control of the contractor** upon its delivery to the owner." *Joyner v. Aetna Cas. & Sur. Co.*, 259 La. 660, 678, 251 So. 2d 166, 172 (1971) (emphasis added). Once the plaintiff in *Joyner* established that no fault independent of the contractor's workmanship or material (such as the injured party's own fault) caused the failure, the burden shifted to the contractor.

This Court is not persuaded that it should modify the Louisiana Supreme Court's current framework—where the burden shifts to the defendant when the construction leaves the control of the contractor—to a rule that allocates burden based on the parties' scope of liability.

[5] During closing arguments, Bluewater admitted that it had not found a case to support its argument that the party denying the applicability of an indemnity provision has the burden of proving that the opposing party is *not* entitled to indemnity. (ECF No. 160 at 70).

Accordingly, Bluewater bears the burden of proving by a preponderance of the evidence that the umbilical failure was due to damage caused to the umbilical during transpooling or installation.

(iv) Bluewater's Indemnity Claim Fails as a Matter of Law

Neither of Bluewater's experts—Mr. Perkin and Mr. Casellas—testified that damage to the umbilical during installation was the most likely cause of the damage.

Bluewater's electrical engineering expert—George Casellas—testified that physical damage during installation *was just as likely* to have caused the umbilical's failure as the defective splice theory. (ECF No. 140 at 79).

Bluewater's mechanical engineering expert—Greg Perkin—testified that he could not "rule out the possibility" that damage sustained during installation caused the failure, but declined to provide an opinion as to the relative likelihood. (ECF No. 141 at 93).

Accordingly, even if the Court were to adopt all of Bluewater's experts' opinions (which it does not), Bluewater fails to meet its burden under Louisiana law.

In sum, the Court finds that (i) Bennu has satisfied its initial burden of proving of that no fault independent of Bluewater's workmanship or materials (i.e. post-installation damage) caused the failure; (ii) Bluewater failed to rebut the inference by proving that the failure of the umbilical was the result of something outside of Bluewater's scope; and (iii) Bluewater's indemnity defense fails as a matter of law. Accordingly, Bennu has prevailed on its breach of warranty claim.

(v) Bennu Has Proven—By a Preponderance of the Evidence—that a Manufacturing Defect Caused the Umbilical's Failure

Alternatively, even if the Court were to modify or reject *Joyner's* burden shifting framework and require Bennu to prove—by a preponderance of the evidence—that a manufacturing defect caused the failure, Bennu has met that burden.

The preponderance of the evidence supports Bennu's theory that defective splices caused the umbilical's electrical failure. Bennu's electrical expert—who concluded that defective splices are 90% likely to have caused the umbilical's failure—was far more credible than Bluewater's experts. There is virtually no evidence to support the competing theory that damage occurred during installation sufficient to cause the umbilical's failure.

Expert Testimony

Bennu's principal expert witness was Geoffrey High. Bluewater moved to strike two aspects of Mr. High's testimony that allegedly fell outside the scope of his expert report[6]: (i) the environment in which the splices were performed and (ii) issues with the inner insulation surrounding the conductors. (ECF No. 139 at 237).

Mr. High's testimony discussing issues with the inner insulation fall within the scope of his expert report. (ECF No. 157 at 15).

Federal Rule of Civil Procedure 26(a)(2)(B) requires a testifying expert to submit a written report to prevent unfair surprise when that expert testifies. FED. R. CIV. P. 26(b). The basic purpose of Rule 26(a)(2)(B) is to prevent unfair surprise with respect to the expert's testimony." *Davis v. Parker Drilling Co.,* No. Civ.A. 01-2355, 2003 WL 1824834, at *1 (E.D.La. Apr.7, 2003) *(citing Reed v. Iowa Marine & Repair Corp.,* 16 F.3d 82, 85 (5th Cir.1994)). However, the rule "contemplates that the expert will supplement, elaborate upon,

[6] The Court ruled that Mr. High could not testify about the weather events because he relied on the conclusions of his team members. He was allowed to testify about the transpooling event. (ECF No. 139 at 60-63).

explain and subject himself to cross-examination upon his report." *Thompson v. Doane Pet Care Co.*, 470 F.3d 1201, 1203 (6th Cir. 2006); *see also Muldrow v. Re–Direct, Inc.,* 493 F.3d 160 (D.C. Cir. 2007) (holding that allowing expert testimony beyond that in an expert report is harmless under Rule 37 where the testimony was an *elaboration* of a written report).

Mr. High expressly stated in his report that sea water ingress into electrical cables could be traced to:

> Degradation of insulator properties at any point due to high electrical field stress (voltage) over long periods of time in the presence of inherent manufacturing defects including impurities, gas voids, mechanical defects, conducting projections, or contamination mineral salts. This applies to all insulation materials used in umbilical electrical system, not just the insulation on individual conductors. High Report ¶ 52(a)(ii).

(ECF No. 158 at 33).

Mr. High's explanation of *how* the seawater penetrated to the inner insulation is not a new opinion. It's an elaboration of his "seawater ingress" theory.

In Mr. High's expert report, he concludes that seawater penetrated through all of the protective layers and damaged the quad. Bluewater complains that Mr. High's report only discusses how the seawater penetrated through the outer insulation and is devoid of any detail about how the sea water penetrated through the inner insulation. However, Mr. High's conclusion that seawater penetrated to the quad assumes that seawater penetrated the inner insulation. Bluewater therefore had fair notice of his seawater ingress theory and could have questioned Mr. High about how seawater penetrated the inner insulation. Accordingly, Mr. High's testimony about issues with the inner insulation is within the scope of his expert report.

Nor is Mr. High's discussion of the importance of splicing in a controlled environment outside the scope of his report. In the report, Mr. High stated that the seawater ingress could be attributable to manufacturing defects including impurities or contamination by mineral salts. In

the report, Mr. High even suggested that Tyco Rochester, the cable manufacturer, should have performed the splices in its facility. (ECF No. 158 at 34) ("I have required that the splices be made by the manufacturer of the cable in its facility, in this case that would have been Tyco Rochester."). Bluewater should not have been surprised by Mr. High's testimony that (i) the splices should be performed in a "controlled environment" and that (ii) Parker's facility was not a controlled environment. *See Reed v. Iowa Marine & Repair Corp.,* 16 F.3d 82, 85 (5th Cir.1994) (stating that the basic purpose of Rule 26 is "preventing prejudice and surprise").

Even if portions of Mr. High's testimony exceeded the scope of his report, Bluewater waived its scope objection by failing to timely object to any of the relevant testimony.

Mr. High first alluded to issues with the inner insulation and the importance of splicing in a "controlled environment" during his direct examination. When the Court inquired about the process undertaken to reinstate the waterproof capability of the cable, Mr. High elaborated on his seawater ingress theory by explaining how seawater penetrated to the inner insulation. (ECF No. 139 at 83-84). Bluewater failed to object.

During cross examination, Mr. High delved into greater depth about the inner insulation on the conductors and the possible impurities resulting from the failure to perform splicing procedures in a controlled environment. Bluewater did not object to the testimony as non-responsive. Nor did Bluewater raise its scope objection at this time.

Rule 614(c) states that "[a] party may object to the court's calling or examining a witness either at the time or at the next opportunity when the jury is not present." FED. R. CIV. P. 614(c). In a bench trial, the timeliness of objections under Rule 614 should be judged by the usual standard under Rule 103(a)(1) because the purpose of Rule 614(c) is to relieve counsel of the embarrassment attendant upon objecting to questions by the judge in the presence of the jury. 29

Charles Alan Wright & Victor James Gold, Federal Practice and Procedure § 6236 (1997); *see also* Note to FED. R. CIV. P. 614(c). Accordingly, Mr. High's testimony given in response to the Court's interrogation is subject to the usual objections as to admissibility.

Federal Rule of Evidence 103(a)(1) requires a "timely objection or motion to strike ... stating the specific ground of objection." *C.P. Interests, Inc. v. California Pools, Inc.*, 238 F.3d 690, 696 (5th Cir. 2001). Because Bluewater failed to timely object to any of the relevant testimony, Mr. High's testimony regarding the environment in which the splices were performed and potential issues with the inner insulation is admissible.

(i) Geoffrey High's Testimony

A. Mr. High's Methodology and Experience

On relevant work experience, Mr. High has a decided advantage over Bluewater's experts. In the past ten years, he has worked on about twenty-five sub-sea tie-back projects where he was ultimately responsible for the umbilical as either a lead engineer or a controls and umbilical engineer. (ECF No. 139 at 24). He has investigated the cause of several failed umbilicals. Additionally, he has experience with Tyco's splicing procedures and has visited the facility where the splices were performed. (ECF No. 139 at 176).

Mr. High's methodology was significantly more comprehensive than the methodology used by Bluewater's experts.

Mr. High analyzed whether there could have been any external events that damaged the umbilical during transpooling, transit, or installation by (i) reviewing all relevant documentary evidence—such as the *Chickasaw* daily installation logs, the Ultra Deep installation plan, and the Tecnhip installation documents; (ii) watching the 36-hour long video of the 16-mile umbilical to

determine if there was visible external damage; and (iiii) examining the results of the post-failure testing.

He analyzed the manufacturing process—including Tyco's splicing procedures—by thoroughly reviewing the manufacturing, assembly, and design documents.

B. Defective Splice Theory

Mr. High testified that he was 90% certain that the umbilical failed due to defective splices. His conclusion is primarily based on four findings:

- There was virtually no evidence of damage during transpooling or installation.
- The failure was caused by a high resistance short resulting from seawater ingress.
- There were several issues with Tyco's splicing procedures.
- The UTA was not the source of the failure.

C. Transpooling and Installation

Mr. High concluded "with a very high degree of certainty" that there was no external trauma that caused the umbilical's failure during installation: (ECF No. 139 at 208). He considered the following:

- Bluewater alleged that the use of a rubber mallet to align the umbilical on the spool during the transpooling process could have caused damage. If so, this would have been installation damage subject to the indemnity. Mr. High concluded that rubber mallet used on the umbilical during transpooling was routine and did not cause the electrical failure of the umbilical. (ECF No. 139 at 96).
- Bluewater alleged that poor weather may have caused damage during the installation process. According to Bluewater, the adverse weather conditions could have stressed the umbilical either by exceeding the minimum bend radius of the umbilical or by causing a

delay that left the umbilical hanging off of the spool in a fixed position for an extended period of time. Mr. High concluded that:

- None of the reported weather events were significant enough to cause the tension to be increased to a value anywhere near the maximum tension allowable on the umbilical. (ECF No. 139 at 151). He noted that he has been involved in installations with worse weather conditions where there were no issues with the umbilical after installation. (ECF No. 139 at 152).
- The 250-year fatigue life of the umbilical takes various sea states such as winter storm waves and currents in consideration. (*See* Bennu's Exhibit 50 at 35).
- The Minimum Bend Radius of the umbilical was never exceeded during installation. (ECF No. 139 at 155).
- The crush loads of the umbilical were never exceeded during installation. (ECF No. 139 at 155).
    - The *Chickasaw* reel was capable of holding tension on the umbilical.
    - An additional tensioner was installed on the *Chickasaw* to spread the tension load on the umbilical.
- The Technip Installation Plan recommendation that the umbilical be cycled every two hours during stoppage periods was arbitrary and conservative.[7] (ECF No. 139 at 212). He noted that it was common for an umbilical to be suspended from an installation vessel chute for several hours.

- Bluewater alleged that the umbilical could have been damaged during the process of installing the hydraulic flying leads. Mr. High concluded that the issue with installation

[7] Julie Ingram—Technip's project manager— agreed that the two-hour period "was a conservative estimate by the author of the document." (ECF No. 138 at 240).

of the hydraulic flying leads could not have caused the umbilical failure because there is no evidence that the flying lead damaged one of the external electrical connectors. (ECF No. 139 at 159).

- As to the general theory that trauma damaged the umbilical, Mr. High noted that the pressure testing performed post failure revealed that the integrity of the hydraulic tubes had not been compromised. (ECF No. 139 at 133). He determined that there is a very low probability that an exterior force could have damaged the quads without causing damage to any of the hydraulic tubes.

D. Seawater Ingress

Mr. High concluded that the failure was caused by a high resistant short resulting from seawater ingress.

He explained how the EnerMech[8] test results were consistent with a high resistance short: A Time Domain Refelctometer (TDR) test was performed to determine where the electrical short occurred. (ECF No. 139 at 132) (referring to Bennu's Exhibit 67). When performing a TDR test, a short electrical pulse is sent to a conductor in the cable. The pulse is promulgated along the cable. When the pulse encounters a discontinuity in the cable, the pulse is sent back to the instrument. If you know the speed of the pulse in the cable, then you can determine the distance of the discontinuity in the cable. However, in this case, the TDR results did not show a complete discontinuity and therefore were not helpful for locating the precise location of the fault. Mr. High testified that these results were "indicative of a high resistance short... a short circuit that has a finite resistance, as opposed to zero resistance." (ECF No. 139 at 135).

[8] The Enermech Report—dated May 28, 2013—includes the results of a series of post-failure testing performed from the Frontrunner Spar. (Bennu's Exhibit 67).

Continuity Resistance (CR) tests were also performed by EnerMech. These tests also lead Mr. High to the conclusion that the failure was the result of a high resistance short. Based on the results of the CR tests, Mr. High concluded "[t]hat somewhere in the electrical system between the Front Runner and the UTA, there had been a breakdown on insulation between all the individual conductors and ground such that there was reduced insulation -- it was compromised insulation resistance between all conductors and between those Quads." (ECF No. 139 at 135).

Mr. High explained that the fact that it was a high resistance short lead him to believe that sea water ingress caused the short. (ECF No. 139 at 144) ("The high resistance short is certainly very characteristic of sea water ingress and insulation degradation."). He explained that the short was likely caused by a process known as tracking. (ECF No. 139 at 144).

Tracking occurs when sea water ingress degrades the insulator because the sea water provides a conductive path across the surface of the insulator. This changes the properties of the surface, a process known as carbonization, which generates heat within the quads and breaks down the insulation until there is low resistance. (ECF No. 139 at 145).

Mr. High explained that there had to be two separate instances of seawater ingress because there were a minimum of two splice failures. However, he clarified that this does not mean that seawater ingress had to occur separately within each of the wires within the quads. The seawater ingress may have occurred to only one wire on each quad: "Because I've explained earlier in my testimony today, when that first process happens a large amount of heat is generated, possibly a flash-over, sufficient to—in a very confined type space in the— inside that Quad to melt the surrounding insulation of the neighboring three conductors and then, bang, it's gone." (ECF No. 139 at 221).

Mr. High also explained how it is possible for the quads to function for a period of time with seawater ingress. He referred to the process of seawater ingress as a "progressive failure." Seawater ingress may begin as soon as the umbilical is submerged, but depending upon the rate of ingress, the catastrophic electrical failure may not occur until later. (ECF No. 139 at 159). He explained that in this case, where the ingress likely occurred due to a splice failure, the rate of ingress depended on the quality of the splice. He testified that this explains why Quad A operated for about 19 hours before it failed while Quad B operated for about three weeks before it failed. (ECF No. 139 at 164).

E. Tyco's Splicing Procedures

Mr. High's conclusion that defective splices caused the umbilical's failure focuses on issues that he had with the splicing procedures used on the umbilical. He identified four main issues: (i) Tyco's reinstatement process—particularly using the heat-shrink tubing procedure; (ii) the lack of hyperbaric testing (high pressure testing under water); (iii) the fact that the splices were performed by Parker personnel, as opposed to Tyco—the cable manufacturer. (ECF No. 139 at 80-81); and (iv) the process was not performed in a controlled environment.

(i) Issues with Splicing and Reinstatement Process

The cabling machine used by Parker to manufacture the umbilical has a limited reel capacity. As a result, eight splices per quad (sixteen total splices) were necessary to construct electrical quads long enough for the umbilical.

The electrical splicing procedures performed by Parker in this case are specified in Tyco Rochester's Engineering Repair Procedures. Although Mr. High was not present for the splicing, he reviewed the procedures used by Parker personnel to perform the splicing of the electrical cables on the umbilical. (ECF No. 139 at 75).

He explained that "the goal is that the splice must be at least electrically and mechanically as robust as the surrounding cable. It must meet or exceed the cable specifications." (ECF No. 139 at 76).

Mr. High had two issues with Tyco's splicing and reinstatement procedures: (i) the copper shielding tape applied and (ii) the heat-shrink tubing procedure. He detailed the splicing and reinstatement process as follows:

The first step involves stripping back each of the layers—the outer casing, the armoring, and layers of tape—to expose the four conductors on each end.

The next step is the butt-welding procedure: the individual conductors (4 in each quad) are mechanically joined in a butt-weld. The objective is to bring the conductors together through four staggered connections. (ECF No. 149 at 79-80).

Next, an injection molding method is used to reinstate the inner insulation around the individual quads. This process involves hot-molding insulation material (the green, blue, red, and white material seen on the cross section) to each conductor. Aside from environmental and personnel concerns (discussed below), Mr. High did not express any issues with Tyco's procedure for reinstating the inner insulation around the individual quads.

At this point, the individual conductors are subjected to a high voltage test while immersed in a water bath. This test is performed to ensure that the insulation is robust. (ECF No. 139 at 84-85). However, according to Mr. High, this test does not evaluate the splices' ability to remain waterproof under pressure.

In the next stage of reinstatement, Parker further reinstated the core belt of the quad by applying several layers of tape—three layers of 3M brand tape and one layer of copper shielding tape—around the quad. Instead of the copper shielding tape, Mr. High testified that he would

have used a "high density polyethylene tape that would be wound around the Quads so that you build up to the outer diameter, progressively build it up." (ECF No. 139 at 86). He claimed that this would have provided greater integrity to the splice.

After the first three layers of tape are applied (a layer of 3M tape, a layer of copper tape shielding, and another layer of 3M tape), the next step was to reinstate the steel wire armoring. (ECF No. 139 at 179-180). A final layer of 3M tape is then wrapped around the steel wire armoring.

Finally, the outer jacket restoration was made through a process known as "heat-shrink tubing." For this outer layer, Parker personnel used "a different material from the inner layers, and then finally, they slide the heat shrink tubing over the whole joint, apply heat to it, and then it's shrunk down over the entire spliced region." (ECF No. 139 at 88).

Mr. High claimed that the heat-shrink tubing procedure used by Parker wasn't mechanically robust enough for the intended design life of the umbilical. (ECF No. 139 at 89). He explained that this process relies on an adhesion process, rather than a fused over-molding process.

Mr. High testified that his preferred process would have provided greater integrity to the splice: "…a process where as each layer of tape is applied, we don't use heat shrink tubing, that's out. As each layer of tape is applied, we use like a heat sensitive tape, which allows us to heat the tape with a hot air gun, a hair dryer if you like, which enables it -- the material of the tape to actually fuse to the existing insulating material on each cable end. So it provides a continuous medium. There is no mechanical joint." (ECF No. 139 at 90).

He explained that this procedure was more fitting for the umbilical's intended purpose than the heat shrink tubing procedure "[b]ecause there isn't a discontinuity where sea water can ingress under the tape." (ECF No. 139 at 90).

(ii) Hyperbaric Testing

Mr. High explained that the outside sheath of the umbilical is designed to allow water to flood the umbilical. However, the internal layers must be waterproof to prevent seawater ingress from shorting the electrical pairs within the quads. In order to reach the conductor, the water has to get through an outside layer of insulation, several water tight layers of tape, and an inside layer of insulation surrounding the conductors.

Mr. High testified that the splicing procedures used by Parker did not include hyperbaric testing on the individual conductors. (ECF No. 139 at 80). He testified that the umbilical was subjected to about 1,500 pounds per square inch (PSI) of pressure. (ECF No. 139 at 86). Mr. High criticized the fact that no testing was done to determine whether the umbilical would remain waterproof under this amount of pressure.

He explained the importance of conducing a hyperbaric test: "In a hyperbaric test, they would clamp like a clamshell around that insulator, around that joint, and then inject water at high pressure, 500 psi or a 1,000 psi and then do the high voltage test, because this in some way simulates what's going to happen to the umbilical underwater if we lost the outer sheathing, water then would penetrate into the inner parts of the cable. So that gives you some confidence that the molding procedure has been performed correctly." (ECF No. 139 at 85).

Although an atmospheric pressure test was performed, Mr. High claimed that this type of testing does not prove the ability of the splices to withstand pressure or to remain waterproof under pressure. (ECF No. 139 at 86). He testified that the umbilical could have passed the

Factory Acceptance Test and the Systems Integration Test (which are both conducted on land at Parker's facility) without any indication that the splices were defective. (ECF No. 139 at 93).

Mr. High claimed that hyperbaric testing was normally included in the splicing procedures that he approves. (ECF No. 139 at 85). Of course, the hyperbaric testing was simply a test. However, it could have disclosed the splicing defect at the time of the splicing to allow the splicing to be redone.

(iii) The Spices were Performed by Parker Employees

Mr. High also expressed concerns about workmanship because Parker personnel performed the splices. According to Mr. High, it is industry practice to have cable manufacturers conduct the splices at their own controlled facility. (ECF No. 139 at 81).

Phillip Malsbary—an employee for Parker—testified that Parker personnel performed the splices in this case because they were under time constraints. (ECF No. 148 at 119). He explained that it usually takes two to three days to perform a pair of splices. (ECF No. 148 at 120). Accordingly, Parker spent two to three weeks to perform eight pairs of splices. (*Id.*).

According to Mr. Malsbary, Parker personnel followed Tyco procedures, were certified by Tyco, and Tyco representatives observed the first two splices that were performed. (ECF No. 148 at 83).

Mr. Malsbary admitted that Parker usually has the cable manufacturer perform the splices because they have more experience than Parker personnel. (ECF No. 148 at 96-97). Indeed, the Clipper umbilical was the first time that Parker employees had ever performed splices.

The Court agrees that these circumstances contribute to the likelihood that defective splices caused the failure.

(iv) Performing Splices in a Controlled Environment

As mentioned above, in addition to penetrating the outer insulation and several layers of tape, the seawater must have also leaked through the inner insulation. During direct examination, Mr. High's criticism focused on issues with the outer layer of insulation (i.e. the heat-shrink tubing process) and the use of adhesive tape.

During cross examination (and partially during the Court's questioning on direct), Mr. High expanded on his defective splice theory by further explaining how seawater may have penetrated the inner layer of insulation.

Mr. High expressed concerns over the facts that the splices were conducted at a Parker facility. (ECF No. 139 at 81). Mr. High opined that performing the splices in an environment that is not controlled increased the likelihood of contamination—particularly during the over-molding procedure used to reinstate the inner insulation.

He explained that the environment where the splices were performed—Parker's Cabett facility—was not a controlled environment. (ECF No. 139 at 176). He claimed that "there is a high risk if it's not conducted in a clean room environment that impurities could be introduced which would effectively compromise the properties of the insulation around the individual conductors." (ECF No. 139 at 178).

The Court agrees that these circumstances contribute to the likelihood that defective splices caused the failure.

F. Failure did not occur within the UTA

The Hydraulic Flying Lead ("HFL") was damaged when the flying leads were installed in December of 2012. Mr. High explained that the only way the flying lead issue could have caused the electrical failure is if the HFL damaged the UTA. (ECF No. 139 at 159). He further

explained that in order for the HFL to cause such damage there would have to be a catastrophic event. Because the original UTA is currently still operational, Mr. High concluded that no such catastrophic damage occurred. Therefore, he concluded that the UTA was not the source of the electrical failure.

As set forth above, EnerMech conducted post-failure testing on the umbilical. Separate post-failure tests were performed by Oceaneering. Oceaneering's report concluded that the failure was probably located within 1,000 feet from the SUTA.

Mr. High relied on the continuity resistance readings from the EnerMech and Oceaneering Reports in determining that the UTA was not the source of the problem. The EnerMech tests were performed from the Frontrunner Spar. (Bennu's Exhibit 67). The Oceaneering tests—dated November 2, 2013—were performed from the subsea end of the umbilical using the ROV. (Bennu's Exhibit 70).

Mr. High explained that when read in conjunction, these tests were helpful for pinpointing the location of the fault. (ECF No. 139 at 136). Mr. High explained that the CR tests from these two tests generally do not correlate. (ECF No. 139 at 134). However, he did identify a "tenuous" correlation between the reports that suggested that one of the quads failed at around 68,000 feet away from the Front Runner Spar, which is about where the seventh splice is located.[9]

Mr. High explained the formula he used to calculate the 68,000 foot mark for the failure of Quad B. Mr. High first concluded that the 32.9 electrical resistance reading (OHMs) in the

[9] The splice logs indicate the approximate location of each of the eight splices along each of the quads. (Bluewater's Exhibit 78). The first splices performed were the ones that were closest to the platform: the first splice was located at the 9,575 foot mark; the second at the 19,261 foot mark; the third at the 28,968 foot mark; the fourth at the 38,719 foot mark; the fifth at the 48,400 foot mark; the sixth at the 58,150 foot mark; the seventh at the 67,937 foot mark; and the eighth at the 77,598 foot mark.

Oceaneering Report was "tenuously" correlated to a finding in the EnerMech Report. He further testified that the resistance of this copper conductor is about .85 ohms per thousand feet.

He explained that the 32.9 ohm reading in the Oceaneering Report placed the fault at about 19,000 feet from the UTA[10], or about 68,000 feet from the Front Runner. The EnerMech test also indicated that a possible short occurred somewhere around the 68,000 foot mark, which is about 19,094 feet from the UTA. (ECF No. 139 at 193). Based on these readings, he determined that there was a strong possibility that the first fault area occurred at the 68,000 foot mark. (ECF No. 139 at 225) ("I'm not saying that I know where the location of the short is. I'm saying that it is a strong possibility that there is a -- one location is in the area of 68,000 feet.").

The correlation identified by Mr. High is too tenuous for the Court to consider in calculating the likelihood that defective splices caused the failure. Indeed, Mr. High admitted that you cannot rely on CR tests when you have a high resistance short because you have an unknown resistance in the path.

However, the Court is persuaded that this formula can be used to determine the maximum distance away from the source that the fault could have occurred. By assuming a resistance of zero, one can measure the furthest distance away from the source (in this case the Spar) that the fault could have occurred because a resistance value higher than zero moves the fault back towards the source.[11] (ECF No. 139 at 141). Accordingly, Mr. High concluded that the fault could not have occurred further than 68,000 feet away from the Spar.

Mr. High explained how he arrived at this conclusion based on the results of the Oceaneering Report: He first noted the recurring .91 and .92 readings of contact resistance. He

[10] 19,352.9 feet =(32.9/.85)/2 *1,000ft

[11] For the Oceaneering Report, the source is the UTA; for the Enermech Report, the source is the Spar.

explained that based on these measurements, the Oceaneering Report generated the conclusion that the fault was within 1,000 feet of the UTA.[12] However, Mr. High explained that these are false measurements because they represent "measurements between common conductors and connectors." (ECF No. 139 at 226).

After excluding the false values and assuming a worse case short circuit value of zero, Mr. High determined that none of the readings would place the fault further than approximately 68,000 feet away from the Spar.[13] (ECF No. 139 at 203). Accordingly, the short could not have occurred within 19,000 feet of the UTA.

Mr. Casellas did not rebut this aspect of Mr. High's testimony. Accordingly, the Court finds that Mr. High's analysis disproved the conclusion in the Oceaneering Report that "the fault of the subsea asset is within 1,000 feet of the UTA or within the UTA itself." (Bennu's Exhibit 70 at 6). This finding supports Mr. High's conclusion that the failure did not occur within the UTA.

G. Other Evidence Considered by Mr. High

Mr. High primarily relied on the evidence discussed above in reaching his ninety percent confidence level that the umbilical failed due to defective splices. However, Mr. High appears to have considered several other factors. The Court now examines the weight of each of these factors.

Mr. High noted that the unusually high number of splices used on the umbilical—sixteen total splices—increased the likelihood of a manufacturing defect at a splice. (*See* ECF No. 139 at 228) ("What I'm saying is that there's -- because of the nature of the splice mechanically and

[12] At .85 ohms per thousand feet, a reading of .91 OHMs would place the fault at about 1,070 feet away from the UTA.

[13] The lowest OHM reading—32.9 (excluding the false .9 measurements)—places the fault at 19,352.9 feet from the UTA, or 67,647.1feet away from the Spar.

electrically there is very high probability of failure in the splice, and the fact that there are eight of the splices in each Quad.").

This aspect of his testimony was corroborated by Mr. Malsbary. He testified that splices create an additional risk of seawater ingress if they're not done properly. (ECF No. 148 at 96). He also agreed that sixteen splices was an abnormally high number for Parker umbilicals. (*Id*.).

Every additional pair of splices adds two to three days to the splicing process. (ECF No. 148 at 120). In this case, the total splicing time was two to three weeks. The fact that splicing procedures were performed over an above-average period of time increases the risk for error and contamination.

In light of this evidence, the Court agrees that the number of splices performed in this case increases the likelihood that defective splices caused the failure.

Mr. High testified about his investigation of the failure of the Condor Umbilical. This was another case where Parker manufactured the umbilical, and the same Tyco procedures that were used in this case were used to perform two or three splices on the Condor Umbilical. Mr. High went through a very similar process for investigating the failure and ultimately concluded that the splice located closest to the platform failed. (ECF No. 139 at 230).

Bluewater suggested that Mr. High's experience with Tyco splices caused him to form a bias against Parker, which in turn caused him to focus on finding splices as the failure mode. The Court disagrees.

It is perfectly reasonable for Mr. High to consider the failed Condor Umbilical—an umbilical that used Tyco's splices and was manufactured by Parker—as a factor in forming his conclusion that Tyco's deficient splicing procedures caused the failure. This is reasoning, not bias.

Based on the totality of the evidence discussed above, Mr. High concluded with ninety percent certainty that one or more splices failed. (ECF No. 139 at 164).

(ii) Gregg Perkin's Testimony

Bluewater's mechanical engineering expert—Greg Perkin—testified that there is no way of determining the cause of the failure within a reasonable degree of engineering certainty without pulling up the umbilical because there are "too many possibilities to rule out." (ECF No. 141 at 31-32).

A. Mr. Perkin's Experience and Methodology

Mr. Perkin was not a credible witness.

There were several significant inconsistencies between Mr. Perkin's testimony at trial and his testimony during his deposition:

- At trial, Mr. Perkin testified that he could not rule out whether there was damage during installation because he could not see the buried portions of the umbilical. (ECF No. 141 at 107). In his deposition, Mr. Perkin testified that based upon the ROV video, he could essentially rule out a dropped or dragged object having caused damage to the umbilical, including the portion of the umbilical that was partially covered by sand. (ECF No. 141 at 108).
- At trial, Mr. Perkin testified that if something was dropped or dragged on the umbilical that was severe enough to damage both electrical quads, then *it is possible* that there would also be damage to the hydraulic tubes. When asked at his deposition, he stated with certainty that if something was dropped or dragged that was severe enough to damage both electrical quads, then there would also be damage to the hydraulic tubes. (ECF No. 141 at 112).

- At trial, Mr. Perkin stated that he did not know whether the rubber mallet usage during transpooling caused damage to the internal components of the umbilical. (ECF No. 141 at 122). In his deposition, he testified that the damage was superficial and that there was no consequence to the internal components of the umbilical. (ECF No. 141 at 123).

Additionally, Mr. Perkin's lack of experience with umbilicals became apparent during trial. Indeed, his testimony demonstrates that he did not even have a basic understanding of how the Clipper Umbilical was installed until trial.

When he was deposed, he testified that the first step of the installation process involved connecting the static and dynamic sections of the umbilical sub-sea. (ECF No. 141 at 127). Mr. Perkin acknowledged that he learned that the umbilical was manufactured as one continuous cable during Mr. High's testimony.

At his deposition, Mr. Perkin testified that there was no material difference between the construction of the static and dynamic sections of the umbilical. He learned from Mr. High's testimony that this was incorrect.[14] (ECF No. 141 at 128).

At his deposition, Mr. Perkin testified that he believed that there was an external structure that supported the dynamic section of the umbilical all the way down to the ocean floor. (ECF No. 141 at 133). After listening to Mr. High's testimony, he discovered that there was an I-tube underneath the Spar, but that the I-tube provided no structural support to the umbilical.

B. Technip's Installation Guidelines

Despite his lack of experience, Mr. Perkin concluded that damage sustained during the transpooling or installation process cannot be ruled out as the cause of the failure. (ECF No. 141

[14] Mr. High testified that "[t]he only difference is that in the dynamic section, the filler rods, the very light gray area I believe are zinc rod, and in the static section it transitions to some synthetic material… The purpose of the zinc rod essentially in the dynamic section is to give it more weight to improve its dynamic characteristics in the catenary between the leading the star and the touchdown point on the seabed." (ECF No. 139 at 69-70).

at 33). However, he declined to provide an opinion as to the relative likelihood that damage during installation caused the failure. (ECF No. 141 at 93).

In reaching this conclusion, Mr. Perkin relied heavily on his assertion that certain Technip installation guidelines were not followed (i) while laying the umbilical (dynamic load analysis) and (ii) during periods of stoppage (static load analysis).

(i) Dynamic Load Analysis

Mr. Perkin explained at trial that the umbilical is "subjected to cyclic loads" when it "is suspended off the end of the *Chickasaw* while the vessel is pitching, heaving and rolling…." (ECF No. 141 at 70).

An "environmental load" refers to the impact that environmental conditions—such as wind, waves, and weather—have on the vessel and umbilical. (ECF No. 141 at 45). Mr. Perkin explained how Technip's Installation Analysis Report analyzes the impact of environmental loads on the umbilical under various conditions. (Bluewater's Exhibit 49).

Section 1.3 states that "[t]his document provides the parameters and operational limitations for the installation of the main umbilical with the Chickasaw… Within the operational limitations, the umbilical's integrity is not compromised." (Bluewater's Exhibit 49 at 7).

Section 4.1 states "[t]he umbilical installation analysis involves modeling the system, running the model calculation, and generating the results using Orcaflex software." (Bluewater's Exhibit 49 at 10).

The conclusion section of the Dynamic Analysis Results states that "[w]ave heights up to 6ft (1.83m) were analyzed, corresponding to the limiting wave heights for the Chickasaw to operate safely." (Bluewater's Exhibit 49 at 43). Mr. Perkin interpreted this to mean that during a

"normal lay," wave heights can be as high as six feet for all environmental directions without it impacting the integrity of the umbilical. (ECF No. 141 at 48). He then suggested that if you exceed the six-foot limit, you are beyond the maximum allowable value to safely lay the umbilical. (ECF No. 141 at 49).

This misinterprets the statement contained in the document. The *Chickasaw*'s ship operating procedures provided a safety limitation for the ship and crew for operations in up to 6 foot waves. The report concluded that whenever the ship could safely operate, there was no risk to the umbilical. The report did *not* conclude that operations above 6 feet would damage the umbilical.

The conclusion that wave heights can be as high as six feet for all environmental directions is not helpful for determining whether the parameters were exceeded without knowing the other conditions. Indeed, Mr. Perkin explained that Tables 7-19 and 7-20 indicate that the umbilical can be laid safely with a 12 foot wave height when there is "no current" and "normal current." (Bluewater's Exhibit 49 at 40-41).

He interpreted these tables to mean that it was safe to lay an umbilical under any combination of conditions listed. However, if you increased the wave height to 13 feet—while all other variables remain constant—then it would not be safe to lay the umbilical.

This aspect of his testimony was misleading. The 12-foot wave height amount was an input value used to calculate the output values such as the maximum allowable values for (i) vessel chute tension, (ii) bollard pull, (iii) chute transverse load, (iv) bend movement, and (vi) tension of TDP. (Bluewater's Exhibit 49 at 41).

Mr. Perkin later admitted that because the 12-foot value is an input, you cannot conclude that it would be unsafe to lay the umbilical in 13-foot waves. (ECF No. 141 at 61). He further

admitted that he was unable to determine the maximum amount allowed for any of the output values (e.g. chute transverse load) before the umbilical would sustain damage. (ECF No. 141 at 67). These Tables only identify conditions that are suitable for laying the umbilical. They do not identify conditions that are not suitable for laying the umbilical.

Moreover, Mr. Perkin admitted that had no information as to whether the loads imparted on the umbilical during installation exceeded the design parameters.

(ii) Static Load Analysis

Dynamic Analysis Results don't apply to when the vessel is stopped because the results assume that the *Chickasaw* is moving away from the Spar. (ECF No. 141 at 68). Mr. Perkin explained that during periods of stoppage, the umbilical was particularly vulnerable because it was subjected to "cyclic loading."

He testified that the *Chickasaw* logs indicate that the vessel experienced 10 to 12 foot waves when the vessel wasn't moving. (ECF No. 141 at 69). Mr. Perkin subsequently provided a static load analysis based on a "reasonable approximation" of the static loads.

Under Mr. Perkin's static load analysis, he concluded that the quads may have been damaged due to 90,000 pounds of force concentrated on one portion of the umbilical as it comes off the chute.

Mr. Perkin's analysis assumed the following:

- The umbilical weighs twenty pounds per foot.
- The distance between the chute and the mud line is approximately 3,000 feet.
- The umbilical came off the chute at a 90 degree angle and therefore the forces are applied at a 45 degree angle.
- No environmental forces, including buoyancy force, were included.

Mr. Perkin concluded that there was 90,000 pounds[15] of crushing force imparted against the portion of the umbilical coming off the chute. (ECF No. 141 at 82-83). He further explained how that 90,000 pound force could damage the quads without there being any damage to the hydraulic tubes:

> If you look at where the quads are located at 180 degrees, if, for some reason that this portion of the umbilical was against the – the chute right here, then, in essence, I'm applying a crushing force across this umbilical, a crushing force of about 90,000 pounds… If the load is being applied directly on top of the quads… that's going to compromise the quads.

(ECF No. 141 at 83-85).

There are several major problems with Mr. Perkin's static load analysis.

First, the umbilical should have been designed to withstand the forces discussed by Mr. Perkin. Indeed, Mr. Perkin admitted that the design limit should be much higher than the normal static load amount applied to the umbilical. Accordingly, under Mr. Perkin static load scenario, the quads would have suffered damage by a load amount that falls within the design limit. Under such circumstances, the failure would be caused by a design defect.

Second, Mr. Perkin's load analysis relies on the erroneous assumption that the umbilical came off the chute at a 90 degree angle. Mr. Perkin's diagram depicted the chute as an arc opening up away from the ocean floor, rather than an arc facing downward toward the ocean floor. In reality, the umbilical is released from the chute at a gradual angle, as opposed to an immediate drop at a 90 degree angle.[16] The purpose of the chute and its design is to control tension, not exacerbate it. Because of the design of the chute, the 90,000 pound cyclic load

[15] Mr. Perkin arrived at 90,000 pounds by multiplying 60,000 x 1.5. He explained that in order to account for the magnitude of the vector, he would assume a multiplier of 1.414 (he then rounded up to 1.5) "because it's a 45 degree angle."

[16] Mr. Malsbary confirmed that under no circumstance would the umbilical come off the chute at a 90 degree angle during installation. (ECF No. 148 at 113).

discussed by Mr. Perkin is spread over a much larger area. This means that the 90,000 pounds of force (even if accurate, given the unwarranted exclusion of consideration of buoyancy) would have never been focused on a concentrated portion of the umbilical. The diagram in the *Chickasaw* Umbilical Installation Plan depicts a 15-foot radius chute that is parabolic in shape, facing downward towards the ocean floor. (Bennu's Exhibit 59 at 66). Perkin's assumptions about the chute and the attendant force are fatally flawed.

(iii) Two-Hour Guideline

Mr. Perkin further explained how violating Technip's two-hour limit during periods of stoppage increased the risk of installation damage. (ECF No. 141 at 41). The "Adverse Weather" section of the Technip's Installation Plan states that "[d]uring the period of stoppage, the umbilical will be cycled every two hours by paying out and moving the vessel." (Bluewater's Exhibit 44 at 100).

Mr. Perkin explained that the two-hour limit is designed to limit the amount of stress imparted on any single spot on the umbilical by letting out some additional umbilical. This process would place the added stress on different parts of the umbilical. (ECF No. 141 at 167). However, during cross examination, Mr. Perkin acknowledged that he has no (i) understanding for the basis of the two-hour limit; (ii) experience as to whether the two-hour period is reasonable; and (iii) knowledge of the standard procedures for installation of an umbilical. (ECF No. 141 at 145-147).

Technip employees provided a much better account of how the installation team managed fatigue during periods of stoppage.

Julie Ingram—Technip's project manager—testified that the two-hour limit was a conservative default rule. (ECF No. 138 at 240).

Jeff Parliament (who oversaw the umbilical installation for Technip) testified that during installation anyone on the ship could have called an "all stop"—where the vessel immediately stops and the installation is halted—in order to address any issues that they observe. (ECF No. 137 at 59). During an "all stop," the Offshore Construction Manager determines whether and when to adjust the umbilical based on analysis performed by the engineers on board the *Chickasaw*. (ECF No. 137 at 186). Mr. Parliament also testified that the Offshore Construction Manager is best suited to make such determination. He testified that the logs do not show whether and when the umbilical was taken in or let out during the "all stops" that occurred in this case. (ECF No. 137 at 187-188).

In light of this testimony, the fact that the installation team *may* not have complied with the two-hour guideline is negligible. Mr. Perkin's premise that the procedure was inadequate or not followed is unsupported by the evidentiary record.

Because his testimony was based on so many incorrect assumptions, the Court rejects Mr. Perkin as a credible expert.

(iii)George Casellas' Testimony

Bluewater's electrical engineering expert—George Casellas—testified that one cannot conclude "with a reasonable degree of engineering certainty" that the umbilical's failure was caused by Mr. High's defective splice theory without retrieving the umbilical. (ECF No. 149 at 128).

Initially, Mr. Casellas suggested that in order to find the cause of the failure with a reasonable degree of certainty, you need to first rule out all other alternative theories. (ECF No. 149 at 126). As mentioned earlier, the Court is not bound by this standard. Accordingly, Mr. Casellas's conclusions regarding what can and cannot be proven "within a reasonable degree of

engineering certainty" have limited probative value as to what can be proven by a preponderance of the credible evidence.

Mr. Casellas discussed two competing theories—damage during installation and Mr. High's defective splice theory—and concluded that the two theories are equally likely to have caused the failure. (ECF No. 140 at 79) (Q: "Do you have an opinion as to whether Mr. High's theory, of the ingress coming at the defective splices, is any more likely or less likely than the mechanism you described a few minutes ago?" A: "It's just as likely."). The Court rejects this conclusion for several reasons.

Mr. Casellas agreed with several aspects of Mr. High's testimony. Most notably, he agreed that the umbilical's failure was caused by a high-resistance short between the conductors, and that the short likely resulted from seawater ingress through a process known as tracking. (ECF No. 149 at 40).

Mr. High was ninety percent certain that the umbilical failed due to defective splices. Mr. Casellas' testimony suggests that there is only a fifty percent chance that defective splices caused the failure.

Three primary differences appear to explain the experts' varying levels of confidence: (i) the adequacy of Tyco's splicing procedures, (ii) the likelihood that damage during installation caused the umbilical's failure, and (iii) Mr. High's ability to estimate the location of the fault.

(i) Tyco's Splicing Procedures

Overall, Mr. High's testimony on splicing procedures was far more credible than Mr. Casellas. Mr. High is significantly more experienced than Mr. Casellas with regards to Tyco's splicing procedures: Mr. Casellas has never worked on a subsea tieback project, does not have any experience with the type of umbilical at issue in this case, and his experience with splicing

stems from his prior employment for ABS, which ended approximately 30 years ago. (ECF No. 149 at 94).

Mr. Casellas's lack of experience became evident during his testimony. Indeed, Mr. Casellas confused the process of performing electrical splices on the cable with the process of terminating the ends of a cable into a mechanical joint inside the UTA. During direct examination, Mr. Casellas testified that it was his understanding that the Tyco splicing procedures performed at the Parker Cabett facility could also have been performed offshore. (ECF No. 149 at 16) ("I think the testimony reflects that for the -- a replacement umbilical, electrical umbilical on this same case, that there was a kink next to the cable at the UTA, and they respliced it out in the field on the deck of the barge… The umbilical was spliced inside the UTA…").

He appeared to believe that the splicing procedures used by the Parker technicians to perform splices in the cables were the same splicing procedures used to conduct a temporary field repair of the UTA. (ECF No. 149 at 16-17) ("The same splice[s] that were taken within the length of the UTA were – I mean, within the length of the umbilical was done inside the UTA to terminate… And all of th[ese] wires, all of these conductors, and quads in this case, were spliced inside the UTA **by using pretty much the same method.**").

After looking at a diagram of a Field Assembled Cable Termination ("FACT") on cross examination, he realized that the procedure performed offshore was not the same as the Tyco splicing procedure at issue in this case. (ECF No. 149 at 121-122). This process refers to terminating two ends of a cable using FACTs to a prepared mechanical joint. At this point, Mr. Casellas acknowledged that he had speculated about the process and that "[i]t would make more sense [that] it would be a mechanical type of splice." (ECF No. 149 at 125).

In addition to the fundamental misunderstanding discussed above, the following circumstances undermine the force of Mr. Casellas' opinion that that Tyco's splicing procedures were adequate for its intended purpose: (i) Mr. Casellas does not have any personal knowledge about Tyco's prequalification process—only a general idea of what "prequalified" means in the industry; (ECF No. 149 at 95), (ii) Mr. Casellas first learned that Tyco's splicing procedures were prequalified when he heard Mr. Malsbary's testimony one day earlier; (iii) Mr. Casellas does not know what Tyco's certification process for Parker technicians entailed; (ECF No. 149 at 96) (iv) when Mr. Casellas rendered his opinion in this case, he was unaware of the fact that this was the first time that Parker's personnel performed splices; (v) while he believes that other cable manufacturers generally use similar procedures as Tyco, Mr. Casellas did not know whether these manufacturers use the same procedure; (vi) Mr. Casellas did not investigate whether Tyco splices have failed in other instances; and (vii) Mr. Casellas has almost no evidence of whether the Tyco procedures were followed; (ECF No. 149 at 129-130) (testifying that the evidence available to him was limited to the tests that were performed and Mr. Malsbary's testimony that the first two splices were witnessed by Tyco representatives).

Yet Mr. Casellas insisted that (i) Tyco's splicing procedures were performed in a clean, controlled environment,[17] (ii) it was unnecessary to perform hyperbaric testing because the splicing procedures were pre-qualified, and (iii) the rearmoring method used by Tyco—the heat shrink tubing method—is equivalent to Mr. High's preferred method of using heat sensitive tape for the outer insulation layer.

[17] Mr. Casellas agreed with Mr. High's premise that it is crucial to perform splices in a controlled environment because the presence of contaminants increases the likelihood of salt water intrusion. (ECF No. 149 at 25) ("a splice is only as good as the way it is applied, if there is contamination, air bubbles, grease, any contaminants that get in there, then, of course, a splice is not going to be, you know, retain its integrity and its tightness. So in any splice that you put on, no matter what, no matter which type of splice, you have to retain the cleanliness and the integrity of your process.").

Mr. Casellas spent a substantial amount of time testifying about how Tyco's Engineering and Repair Procedures (Bluewater's Exhibit 73, 74, and 77), complied with industry standards. (ECF No. 149 at 34). He further testified that "[t]here was no evidence whatsoever that there was any breakdown in the cleanliness of the anti-contaminant procedures used by – in the Tyco methods." (ECF No. 149 at 35).

Mr. High testified that hyperbaric testing should have been performed on each splice because it allows you to determine whether the splices can withstand pressure under water. (ECF No. 149 at 13). Mr. Casellas rejected this contention but admitted that no test was performed to determine whether the splices could withstand seawater ingress under pressure. (ECF No. 139 at 129). Mr. Casellas claimed that hyperbaric testing was unnecessary because the splicing procedures were "prequalified" by Tyco. The Court was not persuaded by this explanation given that Mr. Casellas could not describe what Tyco's prequalification process entailed.

Although hyperbaric testing would not have improved the quality of the splices, it could have revealed that the reinstatement process did not successfully restore the water proof capability around each splice.

Tyco procedures use the "injection molding repair" procedure to restore the inner insulation jacket and use the heat shrink tubing method for the outer insulation jacket. (Bluewater's Exhibits 74 and 77). Mr. Casellas characterized Mr. High's testimony to be that the same "injection molding repair" procedure should have been used to restore the outer insulation jacket. (ECF No. 149 at 34). Mr. Casellas then opined that for purposes of restoring the outer jacket of insulation, the quality of the injection molding repair procedure is equivalent to the heat shrink tubing method. (ECF No. 149 at 36).

This mischaracterizes Mr. High's testimony. Mr. High did not state that the injection molding repair procedure should have been used to restore the outer jacket. Mr. High described his preference for a distinct[18] fused over molding process where "[a]s each layer of tape is applied, we use like a heat sensitive tape, which allows us to heat the tape with a hot air gun, a hair dryer if you like, which enables it -- the material of the tape to actually fuse to the existing insulating material on each cable end." (ECF No. 139 at 90).

Counsel for Bluewater acknowledged this error later on during direct examination and clarified that Mr. High's preferred process was in fact different than the injection molding process.[19] Mr. Casellas then testified—without providing any explanation—that Mr. High's preferred process was equivalent to the heat shrink tubing method. The Court was not persuaded.

(ii) The Likelihood that Damage During Installation Caused the Failure

Mr. Casellas was asked to provide an opinion about whether the 90,000 pound force discussed by Mr. Perkin could have caused physical damage to the conductor and compromise the insulation. (ECF No. 149 at 78).

Mr. Casellas was unable to confirm Mr. Perkin's testimony and was unaware of the amount of force necessary to cause damage.

None of the hydraulic tubes lost any pressure. There is no evidence to suggest that the hydraulic tubes were compromised in any way. Mr. Casellas acknowledged that (i) the post-installation CR tests demonstrate that no traumatic event occurred during installation that was

[18] The injection molding procedure used to restore the inner insulation involves spraying a small amount of molding release agent to each half of the mold cavity. (*See* Bluewater's Exhibit 74 at 4).

[19] "I had asked you how the shrink wrap splicing method used on the insulation layer compares to the –compares to what I thought was Mr. High's testimony, that he preferred the mold injection on that layer. And I misstated that." (ECF No. 149 at 73).

significant enough to cause the cables to short at that particular instance. (ECF No. 149 at 113); (ii) that if a progressive failure occurred from tracking caused by sea water ingress, then the umbilical could have passed all of the post-installation tests; and (iii) that there was no evidence of any kinking of the umbilical during installation. (ECF No. 149 at 113-115).

Based on the above evidence that Mr. Casellas accepted as true, coupled with the new information that he learned during the trial (e.g., that this is the first time that Parker has ever performed splices), it is unreasonable for Mr. Casellas to maintain his initial conclusion that damage occurring during installation was just as likely as the defective splice theory.

(iii)Pinpointing the Fault

Mr. Casellas testified that it is impossible to use the results of the Oceaneering CR Test to conclude that the fault could not be located further than 68,000 feet away from the Platform if the fault resulted from a high resistance short. (ECF No. 149 at 41). For the reasons discussed in the Court's analysis of Mr. High's testimony, the Court rejects this conclusion. The Court has heard no scientific explanation as to why the resistance calculation performed by Mr. High would not set a maximum distance of 68,000 feet from the spar. A contrary conclusion, without explanation, has little probative value.

No Evidence of Installation Damage

Every witness who viewed the ROV video testified that they saw no evidence of any subsea damage.[20]

The Court's conclusion is heavily influenced by the fact that none of the professionals involved in the installation recognized any untoward issues during transpooling or installation.

[20] Gregg Perkin at ECF No. 141 at 107; Geoffrey High at ECF No. 139 at 161; Ross Frazer at ECF No. 138 at 28; Phillip Malsbary at ECF No. 148 at 110.

James Jones—Bluewater's inspector who was on board of the *Chickasaw* for the umbilical installation—was responsible for reporting any umbilical issues. Over the entire installation process, Mr. Jones frequently sent emails[21] to Bluewater and Ross Frazer (ATP's project manager) providing detailed updates. (ECF No. 139 at 119). In all of these emails, Mr. Jones showed no concern about the umbilical or the installation process. (*Id*.).

The Daily Vessel Reports (DVRs) were prepared on board by the vessel administration by collecting input from all entities on board. (ECF No. 137 at 181). Mr. Jones reviewed each of the DVRs and had an opportunity to comment on each one. Jeff Parliament (who oversaw the umbilical installation for Technip) and Julie Ingram (Technip's project manager) reviewed each of the DVRs. Both Mr. Parliament and Ms. Ingram concluded that there was no reason to believe that the umbilical suffered fatigue in a manner that could have permanently damaged the umbilical during installation. (Jeff Parliament at ECF No. 137 at 196); (Julie Ingram at ECF No. 138 at 250).

Cliff Dronet—Bluewater's project manager—wrote an email to Ross Frazer on the last day of installation indicating that Bluewater's personnel believed that there were no installation problems. (*See* Bennu's Exhibit 12) ("…we feel there is no need for the Iron Horse to monitor the UTA after lay operations. According to our personnel on Front Runner, pressure on the umbilical during lay was fine, along with continuity check.").

Mr. Frazer—ATP's vice president—testified that the "preponderance of the opinion" of all of those on the project team was that the damage was caused by a splice failure. (ECF No. 138 at 58, lines 9-12). This is consistent with the documentary evidence.

[21] During the final four days of installation (November 17 to November 20th), Mr. Jones was sending emails every six hours.

Mr. Frazer wrote an email on June 3, 2013 to BSSE stating that "the failure appears to be in two of the splices. Thus the other splices are questionable and susceptible to failure over time." (Bennu's Exhibit 26).

In August of 2013, Mr. Frazer and Mr. Flores—Bluewater's engineer—worked on a report entitled "Temporary Power and Comms from Vessel." The report—which was submitted to BSEE—states: "An ongoing investigation in to the root cause of the quad failures in the umbilical indicate **that it is likely that the failures occurred at splices** in the electrical conductors that were made as part of the umbilical fabrication/layup process." (Bennu's Exhibit 28) (emphasis added).

The report—which indicates that it was most likely a splice failure—relies on much of the same evidence relied upon by Mr. High. The report notes that (i) the ROV video survey does not show any external damage and (ii) the hydraulic tubes are operational. (*See* Bennu's Exhibit 28) ("A visual ROV survey of the umbilical found no external damage and that finding supports the splice failure likelihood. It is worth noting that the tubes in the umbilical for control fluid supplies, annulus monitoring, and chemical injection have all demonstrated full integrity which adds to the expectation that the failure in the conductors is not from an external source.").

On October 24, 2013, Mr. Flores wrote an email suggesting that the umbilical failed due to an issue with a splice. (Bennu's Exhibit 30) ("[t]he tests that we performed from topsides indicated that the quads failure was located at the 7th splice (umbilical has 8 splices were quad) therefore near the UTA… I am interested in seeing the Oceaneering report, and if Parker will acknowledge that it is a splice failure and therefore a warranty claim.").

Accordingly, all of the contemporaneous evidence points to splice failure as the cause of damage.

Bennu has established by a preponderance of the evidence that the umbilical failed due to a manufacturing defect.

(vi) Bennu is Entitled to Recover $29,708,192.00 on its Breach of Warranty Claim.

In its September 18, 2014 Memorandum Opinion, the Court held that (i) if Bennu succeeds on its breach of warranty claim, it may only recover *direct* damages resulting from the umbilical's failure; and (ii) Bennu's costs associated with operating the temporary umbilical—including the expenses incurred to position the vessel to provide the temporary umbilical—constitute direct damages. (ECF No. 99).

Bennu seeks $30,918,192.00 in damages on its breach of warranty claim. Bennu's alleged damages fall into four categories: (i) $14,561,365.00 in "Remediation Costs;" (ii) $14,724,808.00 in "Temporary Umbilical Costs;" (iii) $1,097,125.00 in "Well Restart Costs;" and (iv) $534,894.00 in "Investigation Costs." (ECF No. 158 at 18).

The Remediation Costs category refers to all of the costs necessary to complete the permanent umbilical replacement. Bennu used the Gomez Umbilical—which it had in its inventory—for the dynamic section of the replacement umbilical. (ECF No. 137 at 54) (John Simon's testimony). Bennu charged $1,006,429.00 for the cost of the "Gomez Umbilical." (Bennu's Exhibit 139 at Attachment F.1.1). Rodney Sowards—Bennu's accounting expert—testified that the $1,006,429.00 valuation is based on what ATP originally paid Bluewater for the umbilical and two UTAs back in 2010.[22] (*See* Bennu's Exhibit # 151) ($1,006,429.00 is the sum of the first three line items listed on the Gomez Umbilical Purchase Order: (i) the "Main Umbilical" at $492,000.00; (ii) the "UTA Manifest End" at $229,960.00; and (iii) "UTA Tree End" at $284,532.00). Mr. Sowards explained that although one of the UTAs was not used in

[22] Mr. Sowards testified that he does not know how much Bennu and ATP allocated for the Gomez Umbilical under the Asset Purchase Agreement.

the remediation, it lost its value once it was severed from the umbilical. (ECF No. 119 at 42). He further explained that ATP would not have been able to spend less by buying a new umbilical due to the additional costs for design and installation. (ECF No. 119 at 44). The Court credits this aspect of his testimony.

Mr. Sowards acknowledged that Bennu did not reduce the value of the Gomez Umbilical down from the 2010 purchase price. (ECF No. 140 at 44). To account for the depreciation in value over approximately three years, the Court finds that a $250,000.00 reduction is warranted. Accordingly, the Gomez Umbilical should have been valued at $756,492.00.

For the Temporary Umbilical Costs category, Bluewater challenges the costs incurred as a result of the *Ambassador* (the vessel providing the temporary umbilical) losing a thruster.

In December of 2013, the *Ambassador* lost a thruster and returned to shore to get it repaired. While the *Ambassador* was getting repaired, Bennu continued to pay EMAS—owner of the *Ambassador*—a weekly rate of $479,500.00 for two weeks for a total of $959,000.00. (ECF No. 137 at 91). John Simon—Bennu's Chief Executive Officer—testified that that these costs were necessary to keep the temporary solution in place. (ECF No. 137 at 90) (explaining that "[t]here was no other vessel that had an EDL on it and a control station on it that connected back to the Front Runner facility…").

Bennu's expert—Mr. Sowards—testified that paying EMAS these fees during a "two-week dry dock period where th[e] vessel is not provid[ing] any temporary power" shocks his conscience. (ECF No. 140 at 70). Indeed, he admitted that Bennu's agreeing to pay these charges was not a fair business decision. (ECF No. 140 at 71). The Court accepts Mr. Sowards's testimony, and will not require Bluewater to bear the costs of a poor business decision by ATP; Bluewater should only be required to pay the reasonable and necessary costs resulting

from its breach of warranty. Accordingly, a $959,000.00 reduction from this category is warranted.

No adjustments are necessary for the Well Restart Costs and the Investigation Costs categories. The table below provides a break-down of Bennu's warranty damages:

Description	Amount
Costs associated with installation of new electric only umbilical, including two new electrical quads. ("**Remediation Costs**")	$14,311,365
Temporary power and control and monitoring costs associated with the Ambassador vessel and related equipment following Umbilical failure. ("Temporary Umbilical Costs")	$13,765,808.00
Cost of well restart operation following inadvertent shut-in during the period after the Umbilical failure. ("Well Restart Costs")	$1,097,125.00
Costs of investigating malfunctioning Umbilical including Ambassador vessel costs with respect to ROV survey and subsea diagnostic testing by Oceaneering Deepwater Technical Solutions. ("Investigation Costs")	$534,894.00
Total	**$29,709,192.00**

Bennu is entitled to $29,709,192.00 on its breach of warranty claim.

II. Bluewater's Affirmative Claim

As part of its purchase of assets from ATP, Bennu assumed ATP's contractual obligations to Bluewater under Work Order II. Work Order II included a lump-sum turnkey price of $123,019,878.00 for certain work included within the "Scope of Work" as defined therein. (ECF No. 156). The Court must determine the amount, if any, owed by Bennu to Bluewater under the assumed Work Order II.

A. Bluewater Substantially Performed Under the Contract

Bennu contends that Bluewater's affirmative claims fail because it did not substantially complete its work under the contract by failing to deliver a fully functional umbilical. (ECF No. 158 at 19). Under Bennu's theory, it owes nothing to Bluewater under Work Order II.

Louisiana law provides that "whether there has been substantial performance is a factual determination about whether the construction is fit for its intended purpose despite the deficiencies." *Lang v. Sproull*, 45,208 (La. App. 2 Cir. 4/28/10), 36 So. 3d 407, 417 (internal citations omitted); *see also Neel v. O'Quinn,* 313 So. 2d 286, 290 (La. App. 1975) (citations omitted), *writ denied,* 319 So. 2d 440 (La. 1975) ("Substantial performance is said to exist when the house (or other construction) may be used for the purpose intended even though certain defects or omissions in construction exist.").

Bennu relies on *Lang v. Sproull* in arguing that if Bluewater failed to substantially perform, then Bennu is entitled to recover both (i) its direct damages for Bluewater's breach of warranty and (ii) a judgment that precludes Bluewater from recovering outstanding amounts due. *Lang v. Sproull*, 45,208 (La. App. 2 Cir. 4/28/10), 36 So. 3d 407, 411. Indeed, in *Lang*, the plaintiff was awarded (i) damages to remedy the contractor's elevation and drainage defects; and (ii) the contractor was barred from recovering the balance owed under the contract due to lack of substantial performance.

In *Lang*, a homeowner contracted for the "the construction of a metal building measuring 30 feet by 50 feet to be used as a boat storage area, a workshop for her husband, and a play area for her children." *Lang v. Sproull*, 45,208 (La. App. 2 Cir. 4/28/10), 36 So. 3d 407, 411.

The Louisiana Appellate Court held that there were "substantial defects that render[ed] the building unfit for its intended purposes." *Lang v. Sproull*, 45,208 (La. App. 2 Cir. 4/28/10),

36 So. 3d 407, 417. Specifically, there were elevation problems and related drainage issues that caused water to flow into the front of the building and that "the defects touch[ed] upon almost every aspect of the construction project." *Lang v. Sproull*, 45,208 (La. App. 2 Cir. 4/28/10), 36 So. 3d 407, 417. As a result, this significantly limited the homeowner's intended use for the building.

The *Lang* Court considered four factors in concluding that there was no substantial performance: (i) the extent of the defects or nonperformance, (ii) the degree to which the purpose of the contract has been impaired, (iii) the ease of correction, and (iv) the use or benefit to the owner of the work performed. *See also Jackson v. Spurlock*, 424 So. 2d 1088, 1089 (La. Ct. App. 1982) (applying the same factors in deciding substantial performance issue).

Bennu asserts that Bluewater did not substantially perform because the umbilical failed after only three weeks of operation. Bluewater contracted to construct and deliver a working subsea tieback. Bluewater's responsibility to install a functioning umbilical was a material part of the project. Moreover, the umbilical was expected to have a design life of 25 years and a fatigue life of 250 years. (Bennu's Exhibit 50 at 35). Accordingly, the Court agrees that the construction was ***initially*** unfit for its intended purpose.

However, the substantial completion analysis does not end here. The evidence shows that after the umbilical failed, the parties investigated the failure, agreed upon both a temporary and permanent solution for curing the defective equipment, and then successfully executed those solutions. After Bluewater assisted in curing the defective umbilical and ultimately completed the project, the construction became fit for its intended purpose.

The Clipper Wells are currently producing. Hydraulic controls are provided to the Clipper Wells through the original umbilical, while the replacement electrical quads provide

electrical power. Bluewater went to extraordinary efforts to complete the Clipper Project even in the face of substantial risk of non-payment for some or all of its services. After ATP filed for bankruptcy, several subcontractors wanted to pull out of the Clipper Project. Bluewater used its business relationships to persuade its subcontractors to complete the project. (ECF No. 148 at 146) (Cliff Dronet's testimony).

Bennu also complains of completion delays. The evidence shows that the causes of delay of the completion date were entirely attributable to ATP's conduct. (*See* ECF No. 138 at 180) (Ross Frazer's testimony admitting that ATP caused the delays in completing the project on time); (*see also* ECF No. 148 at 142-144) (Cliff Dronet's testimony explaining that all of the delays were entirely attributable to ATP) (*see also* ECF No. 148 at 15-17) (Leland Tate—ATP's former president—testifying that all of the delay issues were caused by ATP). The project was not delayed by Bluewater and this defense fails.

In light of these facts, two of the four factors—"the degree to which the purpose of the contract has been impaired" and "the use or benefit to the owner of the work performed"—heavily favor a finding of substantial performance.

Accordingly, the Court finds that Bluewater substantially performed under the contracts.

Even if Bluewater did not substantially perform due to the initial failure, the appropriate remedy is to offset Bennu's warranty damages by the outstanding amount owed to Bluewater.

Bennu asserts that it is entitled to both its warranty damages and a judgment precluding Bluewater from collecting the outstanding amount it is owed under the contracts. However, this is inconsistent with *Perrodin v. S. Siding Co.*, 524 So. 2d 885, 890 (La. Ct. App. 1988).

In *Perrodin*, plaintiffs sued a contractor for failing to complete the installation of aluminum siding and replacement windows on the plaintiffs' home. *Perrodin v. S. Siding Co.*,

524 So. 2d 885, 887 (La. Ct. App. 1988). As a result of this breach, the plaintiffs alleged that the interior of their home was damaged by rain, and would require approximately $3,000 to repair, and an additional $5,000 to complete the windows and siding on the exterior. (*Id.*). The trial court awarded the plaintiffs $8,000.00. The Louisiana Appellate Court reduced the judgment to $4,000.00 to reflect only the additional costs incurred to complete the work in excess of the original contract price. *Perrodin v. S. Siding Co.*, 524 So. 2d 885, 890 (La. Ct. App. 1988) (citing *Ducote v. Arnold,* 416 So.2d 180 (La.App. 4th Cir.1982), writ denied, 421 So.2d 238 (La.1982)) ("If there has not been substantial performance the owner is entitled to recover the costs incurred for the completion of the work which exceeds the original contract price.").

In this case, Bennu's warranty damages reflect all of the additional costs[23] incurred by Bennu to complete the Clipper Project because of the defective umbilical. Accordingly, regardless of the substantial completion issue, Bennu may only recover its warranty damages.

B. Calculating Bluewater's Claim

Bennu and Bluewater stipulated to this formula for calculating the amount that remains due to Bluewater under the parties' contracts:

a. Either the Lump Sum Amount (123,019,878) or the Lump Sum Amount minus the $2.8 Million Adjustment ($120,219,878), plus;

b. The Total VOR Amount of $71,156,942;

c. Minus the following undisputed adjustments:

(i) The total amount of the Technip Claim of $21,772,456;

(ii) The amount of direct payments to Bluewater of $44,607,815;

(iii)The amount of direct payments to Bluewater subcontractors of $110,518,644;

[23] Excluding any consequential, special or indirect damages barred under the ARMSA.

d. Bennu also asserts that the following amounts should be subtracted as part of the calculation:

(i) The $1,989,343 Disputed VOR Total; and

(ii) The $4,530,092 Technip Adjustment ($6,302,548 - $1,772,456);[24]

e. Bluewater asserts that it should be paid $666,947.61 for its non-Clipper invoices for work relating to the Telemark property.

Accordingly, the Court must consider three general categories of disputed amounts: (i) a $2.8 million reduction from the lump sum price based on a calculation error; (ii) disputed change order amounts (change orders are referred to as VORs in the AMRSA) comprised of the $1,989,343.00 in Bluewater charges and $4,530,092.00 in underlying Technip charges; and (iii) Bluewater's assertion that it is owed $666,947.61 in Telemark Claims.

(i) The Parties' $2.8 Million Calculation Error does not Constitute Mutual Mistake under Louisiana Law

"The burden is on the party seeking reformation to establish, by clear and convincing evidence, that a mutual mistake has occurred." *Fireman's Fund Ins. Co. v. Bulliard Farm, Inc.*, 2005-336 (La. App. 3 Cir. 11/2/05), 915 So. 2d 1014, 1017. In order to establish mutual mistake under Louisiana law, the evidence of mutuality must relate to the time of the execution of the instrument:

> A mutual mistake is a mistake shared by both parties to the instrument **at the time of reducing their agreement to writing,** and the mistake is mutual if the contract has been written in terms which violate the understanding of both parties; that is, if it appears that both have done what neither intended. **The evidence of mutuality must relate to the time of the execution of the instrument** and show that the parties then intended to say one thing and by mistake expressed another and different thing.

Fireman's Fund Ins. Co. v. Bulliard Farm, Inc., 2005-336 (La. App. 3 Cir. 11/2/05), 915 So. 2d 1014, 1017 (emphasis added).

[24] This is the difference between the Technip's claim of $21,772,456 and the $20,000,000 paid by Bennu to Technip.

In this case, both parties intended to sign a contract with a lump sum amount of $123 million. Before reducing the agreement to writing, employees of Bennu and Bluewater had discussions about how to calculate the lump sum amount: amounts paid pursuant to Work Order I would be deducted from Bluewater's initial $137 million estimate. It is undisputed that a proper calculation would have resulted in a Lump Sum Price of $120,219,878.00. Jim Woodward—Bluewater's Vice President—testified that the "$2.8 million was included by mistake in the build-up of those numbers." (ECF No. 149 at 152).

ATP did its own due diligence and concluded that the proposed $123 million price was reasonable by comparing it to estimates obtained by other companies for comparable work. Ross Frazer—ATP's project manager—testified that, when he accepted that price for ATP, he did not know how the price had been calculated. (ECF No. 138 at 130) (Bluewater counsel: "…at the time ATP agreed to the lump sum price, ATP did not know how Bluewater had come up with that proposed lump sum price, did it?" Ross Frazer: "Not to my knowledge."). The evidence demonstrates that at the time the agreement was reduced to writing, Ross Frazer approved the $123 million lump sum price—on behalf of ATP— without regard to Bluewater's methodology for calculating that amount.

The Court concludes that there was an error in calculating the lump sum amount. But, the mistake occurred prior to reducing the agreement to writing. By the time of execution, the parties intended to enter into a $123 million lump sum contract. That is precisely what they did. This type of an error does not constitute a "mutual mistake" under Louisiana law.

(ii) Bluewater's Asserted Change Order Total (including the Technip Adjustment) Should be Reduced by $1,421,915

In addition to the $123,019,878.00 lump sum price, Bluewater is entitled to compensation for work the work it performed pursuant to a valid Variation Order Request (VOR) or for work

that constitutes "Extra Work" under the parties' contracts. As shown in the stipulated formula, Bennu asserts that $6,519,435.00 should be deducted from Bluewater's asserted change orders. Bennu breaks this amount into two categories: (i) the "disputed VOR total" ($1,989,343.00) refers to line items included in the VORs that are *not* Technip charges (*i.e.* Bluewater's 15% management fee); and (ii) the Technip adjustment ($4,530,092.00) refers to Bennu's indemnity claim: Bennu asserts that Bluewater must indemnify Bennu to the extent that an invalid VOR consists of Technip charges that Bennu was required to pay directly to Technip to remove Technip's asserted lien on the Clipper Project. (ECF No. 158 at 26-27).

(A) Technip Charges Included in Disputed VORs

Technip filed a lien under the Louisiana Oil Well Lien Act in the amount of $21,772,456 in Lafourche Parish Louisiana for amounts Technip claimed to be due in connection with its work on the Clipper Project (the "Technip Lien").

The Technip Lien included the amounts for work performed by Technip on the Clipper Project related to Bluewater-ATP VORs 15, 16, 19, 29, and 30. The Technip Lien also included amounts due to Technip for work performed by Technip that constitutes Lump Sum Work.

Accordingly, the parties have stipulated in the formula that Technip's $21,772,456 claim should be deducted from the amount due to Bluewater. (ECF No. 156 at 2).

Bennu paid Technip $20 million in exchange for release of the Technip Lien. Bennu argues that Bluewater's claim must be reduced to the extent that the $20 million settlement reflects payments made to Technip on account of its lien for VORs that Bluewater could not have passed through to ATP/Bennu. The Court agrees.

Section 13.3 of the ARMSA provides that Bluewater "shall indemnify, Defend, and hold [Bennu] harmless from all costs (including reasonable legal fees and expenses), damages, losses

or liabilities arising from liens" asserted by Bluewater's subcontractors. (Bluewater's Exhibit 35 at 18).

Bluewater argues that Bennu is not entitled to indemnity because the indemnity obligation on which Bennu relies only applies where Bluewater or its subcontractors fail "to pay for services, labor, materials or equipment." (*Id.*). Bluewater asserts that Technip filed liens because ATP (not Bluewater) failed to pay Technip by failing to first pay Bluewater. The Court rejects this argument.

Technip filed the lien "as a result of failure of [Bluewater]… to pay for services, labor, materials or equipment" provided by Technip pursuant to the Bluewater-Technip contracts. The indemnity provision does not make an exception for circumstances where ATP contributes to Bluewater's inability to pay Technip.

Accordingly, the change order total must be reduced to the extent that Bennu paid Technip amounts that Bluewater was not permitted to bill to ATP.

(B) Relevant Terms

Paragraphs 3.2 and 3.3 of the ARMSA govern the general procedures for Change Orders. Section 3.2.2 provides:

> If [Bluewater] desires to make a change in the Work, [Bluewater] shall so notify [Bennu], in writing and such notice shall contain [Bluewater's] proposal for the change in Work… **provided, however**, that [Bennu] shall not be required to accept any change proposed by [Bluewater] and [Bluewater] shall make such changes in the Work only after it has received an executed Change Order as described in Paragraph 3.3.

(Bluewater's Exhibit 35 at 5).

Paragraph 3.3 provides that any changes to Work that resulted in an adjustment of Bluewater's compensation had to be expressly set forth in a Change Order and agreed to by ATP in writing. (*Id.*).

Section 7.3.1 clarifies that "[e]xcept with respect to Extra Work, [Bennu] shall not compensate [Bluewater] for any changes in the Work for which a Change Order has not been executed pursuant to Paragraph 3." (*Id*. at 10).

To the extent that additional work was performed absent an agreed upon, written change order, the parties reserved the right to contest the cost of the work and whether the work should be compensated as Extra Work or included in the cost of the lump sum work. (*Id*. at 10).

Section 1.3 of Work Order II states that "where practical, changes in the contract price or extra work beyond the contract scope activities shall be based upon a mutually agreeable lump change order *unless agreed to otherwise* in which case [Bluewater] shall be reimbursed upon a cost plus 15% basis." (Bluewater's Exhibit 37 at 7) (emphasis added). Bluewater argues that section 1.3 "recognizes that change orders for extra work may be orally approved." (ECF No. 157 at 24). However, this section provides that oral approval is only permitted for Extra Work.

Section 3.4 defines Extra Work:

> …if, because of attendant circumstances, there is insufficient time to negotiate such adjustment, then [Bluewater] shall perform such changes as "Extra Work," in accordance with the rates established in the applicable Work Order or, if no such rates exist therein, in accordance with [Bluewater's] customary and usual rates, subject always to the Parties' rights to contract the cost of such Extra Work and/or whether such work is part of the Work or is Extra Work.

(*Id*. at 5).

Work Order II contains provisions that specifically characterize certain costs at "Extra Work." For example, section 1.1 states that "[a]ny changes to the agreed upon scope of work/supply or delays not caused directly by [Bluewater] will be considered extra work and shall be reimbursed in accordance with the Commercial Terms of this proposal." (Bluewater's Exhibit 37 at 9).

(C) Oral Approval of VORs

As mentioned above, the contracts provided that Bennu would only compensate Bluewater for amounts in addition to the lump price under two scenarios: (i) for work performed pursuant to a signed change order (a "VOR"); or (ii) if the work constitutes "Extra Work."

Yet Bluewater asserts that it is entitled to full payment of the disputed VOR total based on its theory that each VOR that was orally approved by ATP.

Under certain circumstances, Louisiana courts recognize oral approval of change orders even if the contract requires modifications to be in writing. *Cajun Constructors, Inc. v. Fleming Const. Co.*, 2005-2003 (La. App. 1 Cir. 11/15/06), 951 So. 2d 208, 214 (La. Ct. App. 2006) (quoting *Pelican Elec. Contractors v. Neumeyer*, 419 So. 2d 1, 5 (La. Ct. App. 1982)); ("Written contracts for construction may be modified by oral contracts and by the conduct of the parties, and this is true even when the written contract contains the provision that an owner is liable only if the change orders are in writing.").

In *Cajun*, the parties entered into a subcontract agreement where the plaintiff was required to perform certain pile and sheet driving services in exchange for a lump sum payment. The parties contemplated that a significant portion of the lump sum work ($200,520.00 out of the $773,392.50 lump sum price) would include the installation and removal of a 200 foot-wall of sheet piling. Sometime thereafter, a meeting occurred where the parties determined that the plaintiff no longer needed to install the wall in order to complete the project.

At the end of the project, the defendant deducted the value of installing and removing the wall from the lump sum amount and paid the plaintiff the difference. However, the contract provided that any changes made to the lump sum amount had to be in writing. No written change order was made to adjust the lump sum price.

The Louisiana Appellate Court acknowledged that the parties agreed not to perform the work, but concluded that the parties never agreed to change the bid price to account for plaintiff's reduction in work. Accordingly, the Court ultimately held that the plaintiff was entitled to the entire lump sum amount because "[t]he evidence offered by [defendants] failed to show that the contract was amended orally or by implication." *Cajun Constructors, Inc. v. Fleming Const. Co.*, 2005-2003 (La. App. 1 Cir. 11/15/06), 951 So. 2d 208, 217 (La. Ct. App. 2006).

The facts in this case are similar in that ATP often approved Bluewater's request to perform work, without approving Bluewater's request to charge the underlying invoices to ATP's account.

Based on the evidence in this case, the Court finds that the parties never waived—either verbally or by their conduct—the general requirement that Change Orders may only be approved in writing. The evidence demonstrates that Mr. Frazer and Mr. Dronet understood—at all relevant times—that Change Orders had to be approved in writing. Moreover, there is no evidence to suggest that ATP ever paid Bluewater for a Change Order in the absence of a signed VOR.

(D) VOR Approval Process

Ross Frazer (ATP's project manager) and Cliff Dronet (Bluewater's project manager) primarily handled change orders. Most of the disputed VORs relate to Technip Change Orders that were approved by Bluewater.

Mr. Dronet would submit Change Orders—at meetings or in the form of an email—to Ross Frazer. (ECF No. 138 at 75). According to Mr. Frazer, he responded in three ways: (i) approving the VOR by signing and returning it; (ii) rejecting the request by replying "I reject"; or

(iii) advising Mr. Dronet that the proposed work was prudent for completion of the project, but indicating that the parties would subsequently negotiate which account should be charged after reviewing more information. (ECF No. 138 at 75-77) (stating that "there's a negotiation that's going to have to be completed before we agree on the price because, in some cases, it might not be completely apparent, or fully apparent, if it was due to… something that should been for Bluewater's account or ATP's account.").

Indeed, the disputed VORs relate to those where Mr. Frazer would tactfully approve the work described in the VOR, while reserving the cost apportionment issue—often subtly—for future negotiations. (ECF No. 138 at 111).

As a result, there were several outstanding Bluewater change orders that had not been approved or rejected by the time Mr. Frazer left ATP in October of 2013. (ECF No. 138 at 76). According to Mr. Frazer, these outstanding claims include all of the disputed VORs.

Mr. Frazer insists that he did not orally approve any of the disputed VORs. Mr. Dronet, on the other hand, maintains that he orally approved each of the disputed VORs.

For the reasons discussed below, the Court finds that ATP did not approve—either orally or by its conduct—any of the disputed VORs. However, even in the absence of ATP's approval, Bluewater is entitled to compensation for several of the disputed VORs because (i) the VOR involves work that constitutes "Extra Work;" or (ii) Bluewater is entitled to payment for reasons outside of the change order process in the ARMSA.

VORs 15 and 16

VORs 15 and 16 relate to additional costs charged by Technip because its *Chickasaw* installation vessel had to wait on weather.

Neither of these written VORs is signed by Mr. Frazer. (Bluewater's Exhibits 12 and 13). Mr. Frazer was especially adamant that VORs 15 and 16 had not been orally approved because he recalled that there was "quite a bit of debate with Bluewater about whether or not the work should've stopped." (ECF No. 138 at 209).

A meeting occurred in April of 2013 where Mr. Frazer, Mr. Dronet, and certain Technip representatives (i.e. Julie Ingram) discussed Technip's proposed change orders to Bluewater. Mr. Frazer testified that Bluewater did not even present change orders to ATP during this meeting. (ECF No. 138 at 85). Mr. Frazer explained that he felt his presence at the meeting was "odd" because it only pertained to change order requests from Technip to Bluewater. (ECF No. 138 at 167).

Mr. Dronet claims that Mr. Frazer approved several change orders—including VORs 15 and 16—at this meeting. However, Mr. Dronet acknowledged that Mr. Frazer refused to sign any of the VORs that were presented to him at this meeting.

Julie Ingram—Technip's project manager—testified that every time a Technip change order was discussed at this meeting, Mr. Frazer would acknowledge that Bluewater would be requesting payment from ATP with a corresponding VOR sometime in the future. (ECF No. 138 at 272). Ms. Ingram clarified that "Mr. Frazer never actually approved any change orders between ATP and Bluewater." (*Id*. at 273). The Court credits Ms. Ingram's testimony. Accordingly, the Court finds that Mr. Frazer did not orally approve any ATP-Bluewater VORs at this meeting.

Bluewater argues that—even in the absence of approval—ATP should bear the cost of these VORs because (i) it was ATP's responsibility to provide access to the Murphy platform and thus the cost of access-related delays is borne by ATP; and (ii) the VORs arose because of

ATP's delay of the of the umbilical installation from the summer to the fall of 2012. (ECF No. 157 at 26).

Securing access was ATP's responsibility, and the cost of access-related delays was contractually borne by ATP. (Bluewater's Exhibit 37 at 6-9) (section 3.5 states that "[ATP] shall provide… [u]nhindered access to the facility during the project not to cause schedule slippages or unforeseeable delays;" and section 1.1 states that "[a]ny changes to the agreed upon scope of work/supply or delays not caused directly by [Bluewater] will be considered extra work and shall be reimbursed in accordance with the Commercial Terms of this proposal.").

Access to the platform was controlled by Murphy Oil. Murphy's conduct in granting or denying access was not restricted by a determination of the extent of risk posed by weather.

Under its agreement with Bluewater, Technip was allowed to invoice Bluewater for downtime due to weather if, and only if, it was associated with a named storm. (ECF No. 148 at 202) (Cliff Dronet's testimony). Yet the weather related downtime for the underlying Technip change orders that Bluewater attempted to pass through to ATP (via VORs 15 and 16) was not associated with a named storm. Accordingly, Bennu argues that Technip was not entitled to invoice Bluewater for these weather related VORs.

Based on the Bluewater-Technip contract in evidence, the Court concludes that it is ambiguous as to whether Technip was entitled to pass the costs of these VORs through to Bluewater. The force majeure clause of the Technip-Bluewater contract provides that "[a]ny delays in or failures of performance by either party shall not constitute default hereunder or give rise to any claims for damages if and to the extent such delays or failures of performance are caused by occurrences beyond the reasonable control of such party, including but not limited

to… conditions of wind or weather or sea, which make it impossible or impractical to conduct operations…" (*See* Bennu's Exhibit 2 at 24).

However, the force majeure clause is inapplicable. The delays were caused by Murphy's access restrictions—not by weather conditions that made "it impossible or impractical to conduct operations." (*Id*.). Murphy's decision was certainly weather related, but it was a decision vested in Murphy unconstrained by whether a storm was a named storm.

Mr. Dronet testified that the vessel was not restricted by the weather—that it "was restricted by Murphy's requirements not to proceed unless they had a specific weather window." (ECF No. 148 at 203).

Mr. Frazer admitted that Murphy placed certain conditions on when Technip could access the platform. For example, Murphy required that certain analysis be performed before the *Chickasaw* could enter within 500 meters of the platform. (ECF No. 138 at 212). According to Mr. Frazer, during the umbilical installation, the Vessel Master on board performed such analysis, determined that it could not comply with Murphy's requirements, and made a judgment to cease operations. (ECF No. 138 at 97). As it turned out, Mr. Frazer disagreed with the Vessel Master's decision to cease work and later insisted that Murphy's procedure would have allowed the *Chickasaw* to proceed with installation. (*Id*. at 210). However, Mr. Frazer was uncertain as to when he communicated his disagreement to Bluewater. (*Id*.).

Murphy's precise weather requirements are absent from the record. Murphy's weather limitations appear to indicate that its approval to proceed was premised on the installation information provided by ATP/Technip. (Bluewater's Exhibit 44 at 21). Indeed, Ms. Ingram testified that the delay was due to conditions exceeding those specified in Technip's installation

analysis. (ECF No. 138 at 266). Accordingly, the best evidence shows that these delays were due to legitimate Murphy-imposed limitations that were weather related.

The Court determines that access to the platform was ATP's responsibility. The failure to provide platform access due to a Murphy limitation rested on ATP's economic shoulders.

While acknowledging that it was unclear whether Technip could charge Bluewater for their VORs, Mr. Dronet indicated to Technip that he would attempt to pass along these charges to ATP because ATP assumed weather related costs under the ATP-Bluewater agreement. (Bennu's Exhibit 84) (in reference to the underlying Technip change orders, Mr. Dronet wrote "I advised we would submit a VOR to ATP based solely on the ATP/BWI contract (ATP assumes all weather and standby time in the contract)"). The Court will not second guess Bluewater's business decision to accommodate one of its critical subcontractors—where the evidence shows that (i) the Bluewater-Technip contract is ambiguous as to who bears the cost; (ii) the increased costs were due to circumstances that were outside the scope of Technip's control; and (iii) ATP received immeasurable benefit from Bluewater's extraordinary efforts to keep subcontractors like Technip on the project.

Accordingly, the preponderance of the evidence shows that these costs constitute Extra Work.

VOR 19

VOR 19 is based on Technip Change Order 17 and relates to charges by Technip for an additional tensioner that was installed on the *Chickasaw* barge for purposes of the umbilical installation. (Bennu's Exhibit 121).

Mr. Frazer did not sign VOR 19. Mr. Frazer denies ever orally approving this VOR. According to Mr. Frazer, when this VOR was presented to him, he indicated to Mr. Dronet that

Bluewater may have a case for this, "but they would have to give [him] additional information to make that case." (ECF No. 138 at 99). Mr. Frazer maintained that he never received the information he needed to approve this VOR. (*Id*.). Moreover, Mr. Frazer denied that he was the one that requested that the additional tensioner be installed. (*Id*.).

This is consistent with Mr. Dronet's testimony that Julie Ingram—Technip's project manager—advised him that a tensioner needed to be added to the *Chickasaw* during a meeting at Technip's office. (ECF No. 148 at 152). After the meeting, Mr. Dronet called Mr. Frazer and told him about Ms. Ingram's advice. According to Mr. Dronet, Mr. Frazer responded by saying "okay, that's fine… just give me a change order request as soon as you get a chance." (ECF No. 148 at 153). At the time of this conversation, the related Technip change order had not yet been approved by Bluewater. Yet Mr. Dronet interpreted this conversation to be an unconditional approval that ATP would bear the cost (plus 15%) of installing the additional tensioner. (ECF No. 148 at 161).

Mr. Frazer admitted that he agreed with the analysis that an additional tensioner was necessary. (ECF No. 138 at 196). Again, Mr. Dronet's appears to have mistaken Mr. Frazer's agreement with the proposed course of action as ATP agreement to bear the cost.

The parties' phone conversation is typical of how the parties handled change orders. Mr. Frazer would often approve the underlying work while conveying to Mr. Dronet that the parties would later negotiate who should be charged and how much. Mr. Frazer repeatedly refused to sign the VOR during subsequent negotiations.

Mr. Dronet acknowledged—in an email addressed to his boss (Mr. Mendenhall), dated February 25, 2013—that Mr. Frazer had not yet approved VOR 19. In the email, he reported the results of a recent meeting he had with Technip regarding the change orders and indicated that he

would continue his attempts to obtain ATP's approval for the underlying Technip change order related to Bluewater's VOR 19. (Bennu's Exhibit 84) ("To summarize we discussed continu[ing] to push for approval by ATP on CO 022, 017, 024.").

In another email—dated February 26, 2013—Mr. Flores wrote an email to Mr. Mendenhall and Mr. Dronet setting forth what it would take for Bluewater to make its case for VOR 19. These emails establish that Mr. Dronet and his colleagues fully understood that ATP had not yet approved VOR 19 as of February 26, 2013.

Mr. Dronet also claims that Mr. Frazer told him at a later meeting that "if he was placed on the stand, he would say, yes, he did approve it." (ECF No. 148 at 164). He claims that at another meeting—sometime between January and April of 2013—Mr. Frazer, Leland Tate (ATP's former president), and Keith Goodwin (ATP's former CFO) each reviewed Bluewater's VOR log, and all three of them approved all of the Change Orders listed (including VOR 19). (ECF No. 148 at 164). This testimony was not credible.

Ms. Ingram also testified that the change order (relating to the additional tensioner) between Technip and Bluewater was "approved" by Ross Frazer and Cliff Dronet at the April 2013 meeting. However, Ms. Ingram clarified that she meant that Mr. Frazer approved the course of action—not VOR 19—and that Mr. Frazer did not explicitly comment on whether Bluewater could pass the cost through to ATP. (ECF No. 138 at 262). Ms. Ingram recalled Mr. Dronet stating that he intended to submit accompanying change orders from Bluewater to ATP. (*Id*.).

Mr. Dronet's testimony indicates that he interprets Mr. Frazer's oral approval of the work as constituting approval that ATP would be charged with the cost. However, this is inconsistent

with the emails discussed above, which demonstrate that Mr. Dronet understood that Mr. Frazer agreed that a tensioner should be added, but did not agree that ATP would bear the cost.

Moreover, Bluewater's log notes suggest that as of May 17, 2013, Mr. Dronet still believed that additional information needed to be presented to ATP before it would agree to charge the cost to ATP's account. The log notes—updated as of May 17, 2013—state that VOR 19 is approved. However, the approval is qualified by the statement "need to submit additional documentation." (Bluewater's Exhibit 3).

Based on the above evidence, the Court finds that ATP never approved VOR 19.

The Court now turns to whether this cost should have been charged to ATP. The installation vessel—the *Chickasaw*—had to be modified by adding an additional tensioner in order to reduce the risk of damage during installation.

Bennu disputes both (i) the $821,576.00 amount Technip charged and (ii) Bluewater's $123,237.00 mark-up for this amount.

Work Order II contemplated the use of the *Chickasaw*. The cost of the use of the *Chickasaw* was included in the lump sum price. Work Order II provides that "[a]ny additional costs for vessel substitution will be at [ATP's] account." (Bluewater's Exhibit 37 at 10). However, the contract does not provide that ATP is responsible for the adaption of the *Chickasaw*.

Mr. Dronet claimed that adding a tensioner essentially made the *Chickasaw* a different vessel. (ECF No. 148 at 158). The Court rejects this argument. Work Order II expressly provides that installation of the umbilical using the *Chickasaw* is included within the lump sum. (Bluewater's Exhibit 37 at 10) ("[Bluewater] has included load out, transportation, and

installation of the umbilical from Parker's facility to Front Runner utilizing the 'Chickasaw."). Accordingly, VOR 19 is not a valid additional charge.

Bluewater is not entitled to either the $821,576 Technip charge or the $123,237.00 mark-up.

VORs 25 and 26

VORs 25 and 26 relate to Bluewater's costs for independent contractors who were retained after the anticipated completion date of October 1, 2012.

No written requests for VORs 25 and 26 are in evidence. Mr. Frazer does not recall what VORs 25 and 26 relate to and does not recall having any discussions about them. (ECF No. 138 at 101).

The charges included for VORs 25 and 26 are listed on Bluewater's Change Order log. (Bluewater's Exhibit 3). VOR 25 consists of costs totaling $518,481 and a markup of $77,772. These costs relate to invoices from Pegasus International, Inc. ("Pegasus") and Cliff Dronet ("Dronet") for work performed by Pegasus and Dronet on the Clipper Project after October 1, 2012. VOR 26 consists of costs totaling $455,439 and a markup of $68,316. These costs relate to invoices from CCC and White Wing Inspection for inspection work performed by CCC and White Wing Inspection on the Clipper Project after October 1, 2012.

Although Bluewater failed to establish that ATP orally approved these VORs, Bennu is responsible for them because they would not have been incurred but for the delays caused by ATP.

Work Order II provides that "[a]ny changes to the agreed upon scope of work/supply or delays not caused directly by [Bluewater] will be considered extra work and shall be reimbursed in accordance with the Commercial Terms of this proposal." (Bluewater's Exhibit 37 at 9).

Accordingly, costs incurred due to delays caused by ATP constitute "extra work," which under Work Order II's commercial terms, "[Bluewater] shall be reimbursed upon a cost plus 15% basis." (Bluewater's Exhibit 37 at 7).

Mr. Dronet testified that the anticipated October 1, 2012 completion date was based upon information from Technip about when it could install major components and the time required to complete additional work thereafter. (ECF No. 148 at 136-137). The project was not completed until March of 2013. Mr. Dronet testified that he treated any work that he and Mr. Flores performed after October 1, 2012 as a Change Order chargeable to ATP. (ECF No. 148 at 211).

The Court agrees with Bennu's argument that this provision does not mean that *any* work performed after October 1, 2012 should automatically be charged to ATP. But, *additional* charges directly resulting from delay should have been charged to ATP. Bluewater has met its burden of establishing that each of the additional costs that make up VORs 25 and 26 are attributable to a delay caused by ATP.

The undisputed testimony establishes that all of the delays were attributable to ATP. Mr. Frazer and Mr. Dronet each testified that the causes of delay were three-fold: (i) ATP failed to secure unrestricted access to the Front Runner platform; (ii) ATP failed to pay subcontractors, including Cameron (who pulled critical equipment from the project); and (iii) ATP's decision to split development of the oil well and gas well created increased work. (ECF No. 138 at 179) (Ross Frazer's testimony); (ECF No. 148 at 142) (Cliff Dronet's testimony).

Mr. Dronet credibly testified that (i) these three causes were responsible for essentially all of the delays; (ii) that but for these three issues, the October 1, 2012 completion date was achievable; and (iii) none of the costs included in VORs 25 and 26 would have been incurred if the project had been completed on time. (ECF No. 148 at 140-143, 230). Mr. Frazer admitted

that in order to finish the project, the independent contractors had to keep working past the completion date. (ECF No. 138 at 175-76).

Bennu argues that the inspection services should not be included because "[i]nspections are event driven tasks that need to be performed regardless of delay." (ECF No. 158 at 30). The Court rejects this argument. Had the project been completed on time, the parties would not have incurred post-October 1, 2012 inspection costs.

Accordingly, the entire amount included in VORs 25 and 26 are valid.

VOR 29

VOR 29 is based on Technip Change Order 34 and relates to charges by Technip for additional man hours arising on the Clipper Project for the time period September 30, 2012 to April 9, 2013. (Bennu's Exhibit 131).

Bennu's basis for disputing VOR 29 is that "Bluewater has failed to provide any documentation demonstrating that these costs were actually incurred, that they were properly priced, that they were necessary to complete the work, and that they were outside the scope." (ECF No. 158 at 30).

Mr. Frazer admitted that VOR 29 relates to charges incurred due to project delays caused by ATP's inability to pay Bluewater in a timely fashion. (ECF No. 138 at 102). Although Mr. Frazer could not recall if he ever approved this VOR, he testified that it was clear to him that this was for ATP's account. (ECF No. 138 at 103) ("I don't recall this being any debate at all. It was clear to me that this was ATP's – for ATP's account.").

Moreover, Ms. Ingram testified that the required information relating to the charges was provided to Mr. Frazer either before or at the April 2013 meeting. (ECF No. 138 at 268). The Court credits Ms. Ingram's testimony.

The charges included in VOR 29 total $1,387,687.00, consisting of $1,206,685.00 in Technip charges and Bluewater's $181,002.00 mark-up.

Accordingly, the entire amount included in VOR 29 is valid.

VOR 30

VOR 30 relates to the removal, repair and reinstallation of one of the hydraulic flying leads (HFL) on the gas well at the Clipper Project. (Bennu's Exhibit 132).

The HFLs connect the umbilical, through the SUTA, to the subsea control module located on equipment at the wellheads commonly referred to as the "tree." The gas well HFL was damaged while Technip was installing the flying leads in December of 2012. The damaged HFL was subsequently removed, repaired, and reinstalled at substantial cost.

VOR 30 references the Builder's Risk provision included in Work Order II. (Bennu's Exhibit 132). Mr. Frazer testified that he did not approve the VOR because Bluewater failed to prove that this was a builder's risk claim. (ECF No. 138 at 104).

Mr. Dronet testified that Mr. Frazer orally approved VOR 30 on two separate occasions, including the April 2013 meeting where the Technip Change Orders were discussed. Sometime after this meeting, Mr. Dronet wrote in Ross Frazer's name next to the "Approved by" line at the bottom of page 1 of VOR 30, with the following note: "R. Frazer approved in Technip meeting on 4-4-13." (Bennu's Exhibit 132).

This is inconsistent with the documentary evidence. Indeed, a few days after the April 4, 2013 meeting, Bluewater requested Mr. Frazer's approval that ATP would incur the cost of the HFL. On April 6, 2013, Stan Mendenhall—Bluewater's president—sent an email to Mr. Frazer asking if it was "ATP's intent to continue forward exclusively with the Bluewater option for gas well HFL BAR Claim repair which is requiring the outfitting of the Norman Commander for the

HFL recovery, repair, and redeployment?" (Bluewater's Exhibit 108). In the email, Mr. Mendenhall clarified that a BAR Claim refers to a Builder's Risk claim: "It is hard enough to get paid for the work we've completed and earned under our base subsea lump sum contract. This work is a BAR claim subject to the terms of our contract as being reimbursable in nature and outside the base subsea contract." (*Id*.).

Mr. Frazer responded to Mr. Mendenhall's question affirmatively: "Yes. The email was intended to confirm our intent to retrieve, repair, & redeploy the GC 300 No. 2 HFL using the Technip spread we discussed yesterday." (*Id*.).

Mr. Frazer testified that he did not intend to agree that the costs would be for ATP's account—he only intended to agree that Technip and Bluewater should proceed with their plans to retrieve, repair, and redeploy the hydraulic flying lead. (ECF No. 138 at 110). Mr. Frazer insisted that he did not believe this was a builder's risk insurance claim because ATP had concerns over whether a design or fabrication issue caused the leak in the HFL. (ECF No. 138 at 111).

The evidence demonstrates that Mr. Frazer carefully chose his words to induce Bluewater to perform the repair without expressly agreeing that ATP would incur the cost. Indeed, Mr. Frazer acknowledged that he understood that Mr. Mendenhall "expected to get paid for his work" and that his response email was unclear. (ECF No. 138 at 110).

However, this email does not constitute an approval of the change order under Louisiana law. Although the email may have been intentionally misleading, it must be interpreted in the context of the parties' established course of dealing regarding change orders. Mr. Frazer would regularly approve the work included in a VOR, subject to future negotiations on how the costs

should be apportioned to the parties. Mr. Frazer would then request supporting documentation from Bluewater in order to determine whether to sign off on the VOR.

The evidence shows that Bluewater always understood that a VOR was not approved until Mr. Frazer signed it. Even after Mr. Frazer's response email, Bluewater understood that ATP disputed Bluewater's builder's risk claim. Mr. Woodward—Bluewater's project manager—sent an email on May 12, 2013 to several ATP and Bluewater representatives (including Mr. Dronet) that states: "There needs to be a full resolution of the warranty items relating to the flying lead and SUTA repair." (Bennu's Exhibit 90 at 4).

Accordingly, ATP never orally approved VOR 30. That is not the end of the story.

Bluewater's Indemnity Claim

Alternatively, Bluewater asserts an indemnity claim for the cost of the HFL repair. As discussed above, Bluewater bears the burden of proving that it is entitled to indemnity.

The builder's risk insurance provision obligated ATP to either:

> (a) provide Builder's Risk insurance at its sole cost …; ***or*** (b) to the extent [ATP] does not obtain Builder's Risk insurance, indemnify, defend, and hold harmless [Bluewater] and its subcontractors of any tier ("CONTRACTOR GROUP") from and against liability for loss or damage to (i) the Work in progress and (ii) property of third parties without regard to fault, including the negligence, strict liability or other fault of any member of CONTRACTOR GROUP.

(Bennu's Exhibit 5 at 9, § 1.4) (emphasis added).

ATP did not obtain Builder's Risk Insurance for the Clipper Project. (ECF No. 148 at 193) (Cliff Dronet's testimony). Accordingly, Bennu must indemnify Bluewater for any damage that occurs to the "work in progress." The installation of the hydraulic flying lead constituted "work in progress" for the purposes of the indemnity.

Bennu argues that Bluewater has failed to satisfy its burden of establishing that the indemnity provision is applicable because there is some evidence to suggest that the HFL was improperly designed. The Court disagrees.

Bennu relies on Mr. Flores' email to Mr. Mendenhall, which discussed the possibility that a design defect may have contributed to the problem by noting that "Parker admit[ted] that the way the HFL was built did not allow enough 'tubing compliance' at the Cobra head that had the problem." (Bennu's Exhibit 20). However, it is undisputed that the HFL was damaged as a result of the installation process. Virtually any claim under a builder's risk policy will have an underlying cause. The existence of an underlying cause does not defeat builder's risk coverage, or the indemnity. The fact that Parker's defective design may have contributed to the installation-related failure does not defeat Bluewater's indemnity claim.

Bluewater's indemnity claim is limited to its "liability for loss or damage to the Work in Progress." Accordingly, Bluewater is entitled to all amounts included in VOR 30 except for Bluewater's $477,102.00 mark-up.[25]

(E) Non-Clipper Telemark Invoices

Bluewater seeks payment for non-Clipper Invoices for work relating to the Telemark property purchased from ATP by Bennu. Summary judgment regarding the non-Clipper Telemark claims was denied and reserved for trial.

The Court finds that Bennu assumed the Telemark contracts pursuant to the Asset Purchase Agreement.

[25] The parties have stipulated that the charges reflected in VOR 30 include (i) $3,107,508.00 charged by Technip; (ii) $73,174.00 charged by other Bluewater subcontractors; and (iii) Bluewater's markup of $477,102.00. (ECF No. 156 at 5).

Section 2.02(f) of the Asset Purchase Agreement ("APA") defines "Assigned Contracts" as "…***all*** Contracts relating to the Properties or the Facilities, including those listed in Exhibit A—Part 4(a)… but excluding the Excluded Contracts;" (ECF No. 2706 at 24).

Exhibit A—Part 4(a) of the APA states that "***all*** Contracts related to Telemark, Clipper and the Included Blocks, ***including*** the Contracts listed below are Assigned Contracts." (Case No. 12-36187, ECF No. 2706-1 at 104). With regards to Bluewater, Exhibit A specifically includes the ARMSA and any contracts related to the Clipper Project as contracts assigned to Bennu. (*Id*. at 119) ("Amended and Restated Master Services Agreement dated September 11, 2009 and any contracts between ATP Oil & Gas Corporation and Bluewater Industries L.P. related to the Clipper Project.").

However, as Bluewater points out, the APA and Exhibit A do not state that every contract assigned to Bennu is identified by name in Exhibit A. Accordingly, each Bluewater contract relating to the Properties (i.e., Telemark) that has not been excluded as an "Excluded Contract," has been assumed by Bennu.

Under the "Notice of Exclusion of Certain Executory Contracts," the only Bluewater contracts that were identified as "Excluded Contracts" are "[a]ll work orders under the MSA other than those with respect to the Properties. Note that all work orders with respect to the Properties are contained on Exhibit A Part 4(a)." (Case No. 12-36187, ECF No. 2755 at 8). This document only excluded work orders. It did not exclude work performed on Telemark pursuant to the parties' oral agreements.

At the October 29, 2014 status conference, Bennu invited the Court to look beyond the plain language of the sale documents and discern the parties' intent—which it asserts was to assign only the Clipper related contracts to Bennu. The Court declines such invitation. It is

unambiguous—under the APA, Exhibit A, and the Notice of Exclusion—that oral contracts related the Telemark property have been assumed by Bennu.

Bluewater Vice President—Jim Woodward—gave uncontroverted testimony regarding Bluewater's Telemark work. (ECF No. 149 at 157-162). He testified that none of Bluewater's work on Telemark was done pursuant to a written Work Order. (*Id.*).

Accordingly, Bluewater is entitled to the total $666,947.61 amount of invoices for work relating to the Telemark property.

(F) Bennu's Net Damages

Bennu's net damages are $13,186,254.39:

Category	**Amount**	**Comment**
Lump Sum Amount	$123,019,878.00	Base amount
Mutual Mistake Adjustment	$0.00	No adjustment
Total VOR Amount	$71,156,942.00	BW total change order claim, reduced below
Technip Claim	($21,772,456.00)	Stipulated reduction
Direct payment to BW	($44,607,815.00)	Stipulated payments
Direct payment to subcontractors	($110,518,644.00)	Stipulated
VORs Not Allowed		
VOR 19	($944,813.00)	Vessel Modification within BW's Scope
VOR 30	($477,102.00)	BW is not entitled to mark-up; indemnity only
Telemark Claims	$666,947.61	Allowed
Bluewater's Affirmative Claim	**$16,522,937.61**	
Bennu's Warranty Damages	$29,709,192.00	
Bluewater's Affirmative Claim	$16,522,937.61	
Bennu's Net Damages	**$13,186,254.39**	

(G) Other Pending Matters

(i) ***Bennu's Request for Injunctive Relief***

The parties have stipulated that $1,834,495.75 in subcontractor costs under Work Order II remain unpaid, excluding any costs that may be due to Technip. Bennu asserts that "[i]f the

Court awards Bluewater damages, the Court should issue an affirmative injunction that requires Bluewater to make payments to these subcontractors." (ECF No. 158 at 32).

Bennu's stated basis for such injunctive relief is limited to these conclusory statements: (i) "[a]bsent payment, these subcontractors could assert liens on the Clipper property" and (ii) "Bennu would have a right of indemnity from Bluewater with respect to any such liens." (ECF No. 158 at 32).

Bennu has failed to establish that it is entitled to an injunction under Louisiana law. Accordingly, this relief is denied.

(ii) ***Prospective Lien Waiver Issue***

Bluewater contends that it has a statutory privilege (lien) under LOWLA that secures the amount due to Bluewater for the work that it performed on the Clipper Project pursuant to Work Order II, as well as interest, costs and attorneys' fees.

Pursuant to Section 13.3, Bluewater expressly waived any and all rights to assert a lien against ATP's assets:

> To the maximum extent permitted by applicable law, [Bluewater] agrees that, in consideration of entering into this Agreement and each Work Order executed pursuant thereto, [Bluewater] shall waive any and all right to lien the Work and the real property upon which the Work is located and any hydrocarbon product associated with the Work.

(Bluewater's Exhibit 35 at 18).

The parties dispute whether prospective lien waivers are enforceable under Louisiana law. Because the affirmative award is in favor of Bennu, this issue may now be moot. Not later than July 29, 2015, the parties must each file a brief (not to exceed 10 pages) on whether and how the asserted Louisiana lien should affect this Court's Judgment.

Conclusion

The Court will issue a Judgment consistent with this Memorandum Opinion following receipt of the July 29, 2015 briefs.

SIGNED **July 15, 2015.**

Marvin Isgur
UNITED STATES BANKRUPTCY JUDGE